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THE MAGAZINE FOR GROWING COMPANIES

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THE INC. 500: AMERICA'S FASTEST GROWING PRIVATE COMPANIES

500

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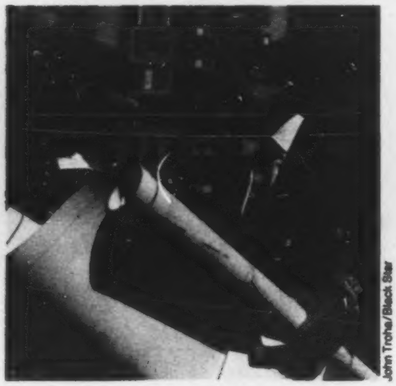

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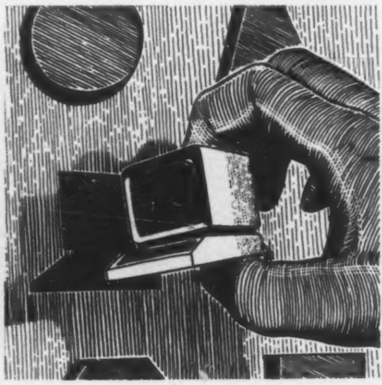

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THE INC. 500:
AMERICA'S FASTEST-GROWING PRIVATE COMPANIES

500

They are an elite group: the 500 fastest-growing privately held companies in the United States. Together they represent an unprecedented five-year growth rate of 770%, $4.4 billion in sales, and a 517% employment increase in five years. Our second annual INC. 500 is much more than a list of fast-track companies, however; it offers a picture of a crucial landscape, the fields that produce America's most dynamic growth. In the report that follows, INC. has mapped that territory at year's end, exploring the changing nature of the list itself and probing the list's top 25 young businesses whose sales grew an average 6,028% over five years (see page 70). We looked, too, at individual entrepreneurs; at Gerald Sigal, the CEO behind Sigal Construction Corp.'s 20,214% growth since 1978 that earned the company the #1 spot on the list (see page 94); at eight men and women who found success with everything from army mess kits to high-tech, geothermal measuring devices (see page 98); and at James L. Shaw, whose optimism spawned the 1,109% growth of Professional Travel Inc. of Louisiana (#148) over five years—and led the company into federal bankruptcy court (see page 108). We looked at how growing companies answer the challenges of four specific industries: the demand for cost control in medical technology, the much-heralded shakeout among manufacturers of computers and related products, the continuing onslaught of foreign competitors in apparel, and the effects of deregulation and the American Telephone & Telegraph Co. divestiture on telecommunications (see page 127). Finally, we looked back at last year's list to see what happened to the class of 1982 (see page 142).

The picture that emerges is testimony to the risks, costs—and triumphs—at the frontier of American business.

Curtis Hartman

Curtis Hartman

INSIDE THE INC. 500

Although they were the pacesetters of the recovery, this year's growth leaders were not immune to the nation's economic changes.

These have been neither the best of economic times—nor the worst. Washington proudly announced that the deepest recession of the past 10 years was officially over, but the balanced budget promised in 1980 had become the skyrocketing federal deficit of 1983. The Fed let interest rates come down, but executives were forced to admit that the days of low-cost money were past. Inflation was reined in, but unemployment stayed high. The dollar firmed on foreign markets, but not without significant effect on the national trade deficit. The bond market stumbled into its largest default in history, but stocks on the big board reached record heights, NASDAQ came into its own, and bulls pumped up the market for new issues. And the papers reported news of change, of leveraged buyouts and unprecedented numbers of bankruptcies, of the turmoil in the video-game industry, the bloodletting among air carriers, the shakeout in computers, of the collapse in oil and the rebound of the auto makers. Is the recovery real, commentators asked, and if it is, can it last?

The INC. 500—and thousands of small, dynamic companies like them—have been the pacesetters of the recovery. They are America's growth leaders, recording major increases in sales, profits, employment, and productivity. But the picture in December 1983 is different from that of last December. The companies on this year's list have grown faster than last year's counterparts, but they are less likely to be profitable. Larger in total sales, they are leaner in staff, and reflect shifting industry strengths and market opportunities.

The INC. 500 is a gauge of growth—500 of the fastest-growing privately held companies in the United States have been ranked according to percentage of sales increase from fiscal 1978 through fiscal 1982. As a group, they have seen meteoric growth, with sales shooting up 770%. In 1978, sales for the 500 companies were just over $500 million; the average company generated slightly more than $1 million in sales, and only 13 topped the $5-million mark. In 1982, sales for the 500 totaled almost $4.5 billion. The average volume was $8.8 million, and more than half exceeded the $5-million mark. Eleven companies climbed to more than $50 million in sales, while the sales leader—Investors Management (#339)—had revenues of almost $162 million in fiscal 1982.

THE INC. 500 AT A GLANCE

No. of companies by industry			
Manufacturing			168
Wholesale			59
Retail			73
Service			172
Construction			28
Total sales in 1982 ($mil.)			$4,410.1
Total sales in 1978 ($mil.)			$506.7
Percent change (1978–82)			770%
Avg. sales in 1982 ($mil.)			$8.8
Avg. sales in 1978 ($mil.)			$1.0
Avg. sales per employee, 1982			$62,467
Avg. sales per employee, 1978			$44,259
Percent change (1978–82)			41%
Compound average annual sales growth (1978–82)			
Total			71.76%
Range			49.28%-277.53%
Median			69.92%
No. operating at a profit			464
1982 profitability			
16% or more	58	1%–5%	219
11%–15%	64	Breakeven	18
6%–10%	123	Loss	18

Over the past five years, 184 companies have seen earnings grow, 125 have seen their earnings drop, and 191 have stayed the same.

Total no. of employees			
1982			57,499
1978			11,448
Percent increase			516.69%
Avg. no. of employees			
1982			115.0
1978			22.9
Year founded			
Before 1960	20	1974	35
1960–70	47	1975	57
1971	14	1976	98
1972	28	1977	110
1973	32	1978	59
Founder is CEO			447
CEO equity			
100%	157	25%–49%	64
90%–99.5%	29	1%–24%	31
51%–89.8%	101	0%	60
50%	58		
No. acquiring other companies (1978–82)			98

The diversity of the 500 testifies to the remarkable variety of market opportunities available for an entrepreneur to seize—from manufacturing five different pet-food flavors at Morgan Manufacturing Co. (#159) to training prospective refrigeration, TV, stereo, and air-conditioning repair personnel at Vocational Training Center (#418). John Nady was a young rock and roller who created a cordless microphone for his band—then turned his innovation into Nady Systems Inc. (#23) and a compound annual growth rate of 139%. Seventy-three-year-old Dr. Robert Martin developed Gravity Boots—metal cylinders to clamp around your ankles, allowing you to hang upside down from a chinning bar, thereby relieving back strain—as part of his Pasadena, Calif., orthopedic practice. Founded in 1971, Gravity Guidance (#2) languished in obscurity until 1980, when American moviegoers saw heartthrob Richard Gere using Gravity Boots in the movie *American Gigolo*. Public awareness was aroused, and sales took off.

The travel industry, with six companies on the list, reported the most dramatic aggregate growth, a five-year increase of 2,234%. The key, in many cases, was vertical expansion. Gary Archer, for example, got into the travel business in the 1960s, when he bailed out a friend whose one-office travel agency was overdrawn by $2,700 at a local bank. Today Archer owns 75% of TravelCenter Inc. of Alaska (#267), now that state's largest retail and commercial travel center, boasting gross sales in 1982 of $53 million from 16 retail offices in Alaska and Hawaii, two national wholesale tour companies, three fishing lodges, a hotel, a limousine service, a snow-removal service, two small air services, and a school to train travel professionals. Not that such expansion is without perils, however: Jim Shaw of Professional Travel Inc. grew 1,109%—to #148 on this year's list—with the same vision of vertical integration, only to founder on cash-flow problems and end up filing for protection under Chapter 11 of the Federal Bankruptcy Code. In addition to travel, other industry growth leaders on the list include eight real estate companies, up 2,161%, and 17 telecommunications companies, up 1,580%.

For 4 out of 5 of the INC. 500 companies, growth has been internal. Of the 98 businesses making acquisitions, most were in the service sector, usually of a single, similar company. Real estate companies were most active in the acquisition arena, topped by Mast Realty Group's (#279) 23 and Windham's (#253) 20.

Besides a record of rapid growth, most of the INC. 500 entered fiscal 1983 with a healthy bottom line: 464 of the companies were profitable in 1982, including 58 that earned 16% or more of sales. Another 64 companies recorded profits between 11% and 15% of sales, 123 were between 6% and 10%, and 219 were 1% to 5%. Over the five-year period from 1978 to 1982, 184 companies saw their earnings grow, 125 saw an earnings drop, and 191 stayed the same. Eighty-eight reported losses in 1978, while only 18 ended 1982 in the red. Among the industries, cable-TV had the largest earnings, followed by real estate and finance. Travel, the sales-growth leader, was the least profitable.

The INC. 500 are primarily young companies, all but 54 born since 1970, most from 1975 to 1978. The date of origin can be deceptive, however. John Nageldinger & Son Inc. (#158) was founded in 1880, but didn't experience its growth spurt until the late 1970s, when it changed from manufacturing industrial regulators and gas compressors to oxygen-therapy equipment for home medical care. W. B. Wood Co. (#409), on the other hand, has been selling office furniture since 1905. Chief executive officer David Kopelman theorizes that "lots of people are buying office furniture now."

Company founders, in 89% of the cases, have held on to the reins and serve as CEOs; 157 of the 500 CEOs hold 100% of their company's equity, while over half hold controlling interest. Of the 213 with less than 50% equity, all but 91 share in at least a quarter of the company, although 60—including 51 company founders—hold no equity at all.

The ability of the INC. 500 to generate new jobs is as impressive as their growth in sales. Employment at the 500 companies has increased 516.6% in the past five years, from 11,448 to 57,499. The average company has 115 employees—92 hired in the past five years. Average productivity as measured in sales per employee is $62,467.

As a group, the class of 1983 is significantly different from the class of 1982. The companies on this year's list are only marginally larger in total sales—up some $200,000 per company from last year—but they have been growing much faster, up just about 200% over last year's average growth rate of 571%. Last year, Altos Computer Systems, now public, topped the list with 14,164% growth. This year it took Sigal Construction Corp. a growth rate of 20,214% to claim the #1 spot. Last year only 115 companies cleared the 1,000% growth mark; this year 178 companies had passed that mark.

This increased growth rate, more than any other consideration, has changed the membership on the list; the pace was simply more intense. This year the cutoff rate for membership in the 500 was 397%, up from last year's 235% cutoff. Of the more than 300 members of last year's list that failed to return in 1983, more than half were still growing, but no longer fast enough to qualify. There were 182 companies that did return, but only 27 climbed in their rankings.

An increased growth rate hasn't been the only change. California—ranked No. 1 in terms of capital resources, as well as No. 2 all around, in INC.'s "Third Annual Report on the States" (see October, page 139)—registered the largest increase in INC. 500 companies, up by 16 companies. Demographic growth leader Florida, ranked No. 6 in the States Report, was the other leader, adding 6 companies. Four states lost 6 companies each: Massachusetts, Ohio, and oil-dependent Texas and Oklahoma.

TOP 10 PERFORMERS: TOTAL SALES

Rank	Company (INC. 500 rank)	1982 sales ($000)
1.	Investors Management (339)	$161,733
2.	Domino's Pizza (457)	128,696
3.	Chioke International (317)	82,677
4.	Forever Living Products (6)	82,172
5.	Wornick (121)	64,328
6.	Houston Wire & Cable (250)	61,608
7.	Timberland (495)	60,000
8.	Nutech (224)	59,600
9.	Amex Systems (325)	58,591
10.	D.R.I. Industries (301)	55,100

TOP 10 PERFORMERS: SALES PER EMPLOYEE

Rank	Company (no. of employees)	Sales per employee
1.	Chioke International (16)	$5,167,340
2.	Pronto Systems (5)	3,141,875
3.	Deerfield Communications (15)	2,533,333
4.	J. A. Cornwell (9)	2,284,444
5.	C. M. Mascolo (3)	1,600,000
6.	Ugly Duckling Rent-A-Car (11)	1,500,000
7.	Windham (35)	1,057,143
8.	Brady Marketing (11)	1,009,091
9.	Sigal Construction (48)	990,299
10.	Cosain (6)	957,743

TOP 10 PERFORMERS: EMPLOYMENT GROWTH

Rank	Company (no. of employees)	New employees 1978–82	Percent growth
1.	Investors Management (10,000)	8,700	669%
2.	Commercial Property Services (1,500)	1,150	329
3.	Paul Newman's Coney Is. Rest. (983)	957	3,681
4.	Vie de France (1,030)	890	636
5.	Hall Real Estate (818)	796	3618
6.	Advanced Tech. (920)	780	557
7.	National Health Care Affiliates (807)	759	1,581
8.	Timberland (1,000)	750	300
9.	Texas Tumbleweed (750)	660	733
10.	Nutech (625)	517	479

There have been changes in industry representation as well. The number of petroleum-related companies among the 500 has dropped from 12 to 8; mining, represented by 3 companies last year, disappeared from the list altogether. There are more manufacturers, 168 compared to last year's 133, and more retailers, 73 compared to 42. But there are fewer wholesalers, down to 59 from 83, and fewer service companies, down to 172 from 210. Computer software companies have climbed from 32 to 44; personnel specialists are down from 10 to 3.

While the 1983 INC. 500 companies recorded faster growth than their 1982 counterparts, profitability fell. Although more than 10% of the companies on each year's list recorded earnings of 16% or more, companies with no earnings tripled, up to 36. While this year's list had 24 more companies that reported a five-year increase in profits, it also had 44 others that reported a shrinking bottom line. While the average company is leaner, employing some 26 workers fewer than the companies on last year's list, productivity as measured by sales per employee has risen $1,300 from last year to $62,467.

That increase in productivity—and decrease in total jobs—is paralleled among the nation's largest corporations, the *Fortune* 500. Fiscal 1982 was hardly rosy for the giants: Aggregate sales were down 5.7%; profits were down 27.1%; and employment, 8.3%. Only in productivity did the *Fortune* 500 outperform the INC. 500. Sales per employee among the *Fortune* 500 was up to just over $90,000, "partly," the magazine said, "because of the 500's grim decline in jobs."

The year 1983 promises to be another period of both opportunity and turbulence for small business. The signs of change are already apparent. Thirty-one of the INC. 500 have at least doubled their work force this current fiscal year, while all but 84 companies have expanded their payroll. However, an industrywide drop in sales already has forced Branson Aircraft Corp. (#195) to reduce its work force by 59% this year, and five construction companies on the list have carved 25% or more of their employee strength since the start of fiscal 1983.

But change is the major constant for America's most dynamic businesses. The names and numbers of next year's INC. 500 will almost certainly be radically different. But the small-business leaders will continue to point the way toward national economic growth. —*Curtis Hartman*

The information published in this report is based on material supplied by the companies. In each case it has been verified in writing by a company officer, by supporting financial statements, and by telephone interviews between INC. *editors and company principals. The published information is the only material that* INC. *will make available.*

THE INC. 500

America's Fastest-Growing Private Companies

Rank, company ('82 rank)	Sales Growth 1978–82		'82 sales ($000)	'78 sales ($000)	Profit range*		No. of employees		Acquisitions '78-'82	Date founded	Business description
	Percent increase	Compound annual rate			'82	'78	'82	'78			
1. Sigal Construction (Washington, DC)	20,214%	278%	$47,534	$234	C	D	48	6	0	1975	Construction mgmt. services
2. Gravity Guidance (Pasadena, CA)	10,506	221	11,454	108	B	A	40	1	0	1971	Mfr. exercise/therapy equipment
3. Fifth Season Travel (Indianapolis, IN)	9,984	217	10,893	108	D	F	25	5	0	1977	Travel planning
4. Hayes Microcomputer Products (Norcross, GA)	9,066	209	12,321	134	C	D	130	7	0	1977	Peripheral software/hardware products
5. Warehouse Appliance (Houston, TX)	8,756	207	8,856	100	B	D	11	2	2	1977	Major appliances retail/wholesale
6. Forever Living Products (Phoenix, AZ)	8,117	201	82,172	1,000	C	C	380	4	15	1978	Aloe vera mfr. & sales
7. Metier Mgmt. Systems (17) (Houston, TX)	7,549	196	37,556	491	C	C	350	25	0	1976	Turnkey computer systems
8. Four Winds Rental (San Juan, PR)	6,150	181	10,000	160	C	D	12	2	0	1978	Housing rental & sales
9. Digital Research (Pacific Grove, CA)	5,702	176	14,951	258	B	A	221	4	2	1976	Microcomputer systems software
10. Commercial & Industrial Admin. (16) (Santa Clara, CA)	5,700	176	23,200	400	D	F	52	2	0	1976	Third-party administration
11. Apoca Industries (97) (Deer Park, NY)	4,979	167	5,421	107	C	F	119	14	0	1974	Telecommunication equipment & sys.
12. Markdata (Pittston, PA)	4,801	165	7,841	160	C	D	175	20	1	1977	Direct marketing
13. Sillerman-Morrow Broadcast. (Middletown, NY)	4,592	162	5,255	112	A	F	132	1	7	1978	Radio & TV stations
14. Burdick's Computer Stores (Overland Park, KS)	4,373	159	9,570	214	B	C	44	2	0	1978	Retail computer sales
15. DEY Laboratories (Concord, CA)	4,243	157	5,548	128	B	F	89	12	0	1977	Respiratory-care products
16. Advantage Distributing (Haverhill, MA)	4,100	155	6,300	150	D	C	30	3	0	1978	Wholesale furniture & waterbeds
17. Tyke International (Pleasant Hill, CA)	4,087	154	8,721	208	C	D	75	3	0	1978	Educational toys sales
18. Polycoat Systems (Hudson Falls, NY)	4,011	153	7,400	180	C	F	35	6	2	1978	Mfr./dist. coatings, insul. materials
19. Commonwealth Savings (Houston, TX)	3,912	152	24,022	599	C	B	380	20	5	1977	Financial services
20. Northern Data Systems (Westwood, MA)	3,778	150	5,037	130	B	F	52	24	1	1977	Dist. small-bus. turnkey computer
21. Royal Silk (Clifton, NJ)	3,405	143	7,150	204	C	C	50	6	0	1978	Mail-order silk-garment catalog
22. Kassouf Parking (25) (Cleveland, OH)	3,252	141	5,900	176	D	A	65	12	0	1972	Garage & real estate operator
23. Nady Systems (Oakland, CA)	3,155	139	3,296	101	B	D	70	45	0	1976	Mfr. wireless communication equipment
24. Senaz Construction (North Hollywood, CA)	3,148	139	4,254	131	C	E	8	4	0	1976	Construction and development
25. Modulite (Canoga Park, CA)	3,135	138	4,079	126	D	D	71	4	0	1977	Mfr. modular lighting fixtures

* INC. estimate. A. 16% or more; B. 11% to 15%; C. 6% to 10%; D. 1% to 5%; E. Breakeven, F. Loss

Chart continues on page 80

500

Rank, company ('82 rank)	Sales Growth 1978–82		'82 sales	'78 sales	Profit range*		No. of employees		Acqui-sitions	Date	Business description
	Percent increase	Compound annual rate	($000)	($000)	'82	'78	'82	'78	'78-'82	founded	
26. Sun-Flex (Novato, CA)	3,096	138	6,057	190	A	C	90	3	0	1977	Glare filters & IBM PC dealer
27. Style Auto (154) (Tarzana, CA)	3,026	136	8,095	259	B	E	40	3	0	1977	Racing apparel importer
28. Effective Management Sys. (Milwaukee, WI)	2,994	136	3,111	101	E	F	41	2	0	1978	Software devel., computer sys.
29. Robbins (Anchorage, AK)	2,922	134	3,318	110	D	D	22	1	0	1977	Consumer electronics
30. Summa Four (Manchester, NH)	2,917	134	3,232	107	C	F	45	5	0	1976	Mfr. microprocessor-based telecomm.
31. Priority One Electronics (Chatsworth, CA)	2,902	134	13,814	460	D	C	54	10	0	1978	Electronics distributor
32. VDS (Sacramento, CA)	2,805	132	17,824	613	D	D	93	9	0	1977	Video equipment sales & service
33. Hot Shot Delivery (Houston, TX)	2,566	127	2,916	109	F	F	27	7	0	1978	Messenger & air courier serv.
34. Unified Mortgage (Santa Clara, CA)	2,552	127	6,268	236	D	D	190	20	0	1972	Mortgage company
35. Tek Aids Industries (Arlington, IL)	2,534	127	8,844	336	D	E	37	9	1	1974	Microcomputer products distributor
36. Furniture Consultants (9) (New York, NY)	2,531	126	19,657	747	D	D	41	4	0	1976	Office-furniture dealer
37. Quality Home Insulation (Walnut, CA)	2,464	125	4,486	175	F	A	125	4	0	1976	Home-energy installations
38. Inacomp Computer Centers (44) (Troy, MI)	2,431	124	36,681	1,449	D	D	65	18	1	1976	Computer retailer
39. United Technical Products (Westwood, MA)	2,431	124	3,391	134	D	F	11	6	0	1977	Computer-grade antistatic products
40. Hetzel Auction Associates (Albuquerque, NM)	2,417	124	3,600	143	A	A	7	1	0	1978	Commercial auctioneers
41. HCW Oil & Gas (Boston, MA)	2,380	123	7,540	304	A	A	80	4	0	1975	Oil & gas acquis., prod. & explor.
42. Comark (48) (Elmhurst, IL)	2,359	123	3,615	147	D	C	28	3	0	1977	Dist. computer supplies & accessories
43. Computer Methods (Livonia, MI)	2,299	121	2,420	101	D	D	51	16	0	1977	Computer software services
44. Feldman Communications (Miami Beach, FL)	2,220	119	5,800	250	B	F	40	6	3	1976	Publishing
45. Vanguard Groups International (Houston, TX)	2,211	119	6,188	268	B	B	32	4	0	1978	Real estate syndicator & oil prod.
46. Brougher International (Greenwood, IN)	2,194	119	7,329	319	D	A	98	10	0	1972	Insur. underwriting, consult. serv.
47. Wolfberg/Alvarez/Taracido (42) (Miami, FL)	2,190	119	6,136	268	E	B	101	19	0	1976	Arch., engineering, interior design
48. Sundown Vitamins (Hollywood, FL)	2,170	118	10,114	446	B	C	71	23	0	1977	Nutritional products distributor
49. ZZYZZX Technologies (Houston, TX)	2,162	118	6,804	301	D	E	37	20	0	1976	Commer. & indus. constr. contractor
50. Equitrac (Coral Gables, FL)	2,142	118	3,002	134	C	F	34	6	0	1977	Computerized billing service
51. TSR (22) (Lake Geneva, WI)	2,133	117	20,773	930	C	C	191	17	3	1975	Publishing
52. Seaboard Electronics (30) (New Rochelle, NY)	2,114	117	3,100	140	F	F	78	9	0	1976	Long-range radio telemetry
53. Con-Serv (Cincinnati, OH)	2,009	114	5,800	275	C	F	100	4	0	1978	Home energy products
54. Visible Changes (Houston, TX)	1,964	113	7,677	372	B	B	260	35	0	1978	Hair-cutting salons chain
55. ComDesign (Goleta, CA)	1,944	113	2,300	113	D	D	33	6	0	1977	Mfr. datacommunication equipment
56. Support Systems International (Richmond, CA)	1,933	112	2,123	104	D	A	46	6	0	1976	Datacomm. cable & switching devices
57. Philadelphia Financial (Jenkintown, PA)	1,926	112	33,745	1,665	A	A	60	50	0	1971	Financial holding company
58. Trident Data Systems (Los Angeles, CA)	1,917	112	2,210	110	D	B	43	4	0	1975	Custom software, application products
59. Church Insurance Consultants (West Des Moines, IA)	1,913	112	2,616	130	F	F	20	2	0	1977	Insurance sales to churches
60. CEM (Indian Trail, NC)	1,907	112	2,451	122	B	C	45	4	0	1971	Analytical instrumentation, biotech.

* INC. estimate: A. 16% or more; B. 11% to 15%; C. 6% to 10%; D. 1% to 5%; E. Breakeven, F. Loss

Rank, company ('82 rank)	Sales Growth 1978–82		'82 sales ($000)	'78 sales ($000)	Profit range*		No. of employees		Acquisitions '78-'82	Date founded	Business description
	Percent increase	Compound annual rate			'82	'78	'82	'78			
61. Rustman Bus (50) (Saint Louis, MO)	1,900	111	13,037	652	C	B	35	5	0	1975	School-bus contractor & sales
62. Hill International (19) (Willingboro, NJ)	1,892	111	10,600	532	D	B	189	17	2	1976	Construction industry mgmt. consul.
63. PBM Office Products (61) (Cleveland, OH)	1,883	111	6,786	342	C	C	59	19	3	1974	Office products distributor
64. Apam (Jacksonville, FL)	1,877	111	4,388	222	D	F	164	50	9	1977	Fast-food chicken
65. Mission Home Health (San Jose, CA)	1,876	111	2,303	117	B	F	40	15	0	1978	Home nursing care
66. Tri-Glas Industries (Daleville, AL)	1,859	110	4,760	243	D	D	164	32	0	1975	Fiberglass truck & van tops
67. Technology for Energy (13) (Knoxville, TN)	1,858	110	18,454	943	D	C	256	25	0	1975	High-technology services & products
68. Commonwealth Mortgage (Boston, MA)	1,814	109	10,050	525	D	B	130	25	0	1961	Mortgage banker
69. Sound Room (Great Falls, MT)	1,789	108	10,091	534	D	C	58	10	0	1977	Consumer electronics
70. Marietta Packaging (Cortland, NY)	1,767	108	3,830	205	D	F	51	5	0	1976	Hotel guest amenities & toiletries
71. Zoom Telephonics (Boston, MA)	1,753	107	3,861	208	B	B	28	34	0	1977	Microcomputer-based phone peripherals
72. Edd Helms (Miami, FL)	1,730	107	8,867	484	D	D	175	25	1	1975	Electrical contractor
73. Ingram Excavation (Baltimore, MD)	1,706	106	4,816	267	D	C	65	15	0	1976	Dump-truck hauling
74. Sentrol (Portland, OR)	1677	105	10,649	599	A	D	112	25	1	1977	Mfr. security systems components
75. Process Technology (Mentor, OH)	1,650	105	2,647	151	D	E	27	4	0	1978	Mfr. electric immersion heaters
76. Sharper Image (15) (San Francisco, CA)	1,641	104	48,030	2,758	D	C	130	15	0	1977	Direct marketing
77. Comsearch (160) (Reston, VA)	1,605	103	3,985	234	A	A	43	5	0	1977	Telecommunications sys. engineering serv.
78. Frontier Cooperative Herbs (Norway, IA)	1604	103	2,047	120	C	F	50	7	0	1976	Wholesale dist. spices & herbs
79. Empire Airways (Hayden Lake, ID)	1,596	103	1,832	108	D	F	35	2	2	1977	Contract flying
80. Tarco (North Little Rock, AR)	1,594	103	10,792	637	D	D	55	27	0	1978	Mfr. roofing materials
81. Ronald Hsu Construction (20) (Capital Heights, MD)	1,583	103	8,520	506	E	C	129	8	0	1976	Construction/general contractor
82. Oracle (Menlo Park, CA)	1,567	102	5,000	300	A	D	38	5	0	1977	Database mgmt. sys. devel. & mktg.
83. View Engineering (Simi Valley, CA)	1,564	102	9,291	558	B	F	103	16	0	1976	Automatic measuring & inspection sys.
84. InSpeech (King of Prussia, PA)	1,564	102	1,830	110	B	A	45	6	0	1978	Speech & auditory programs
85. Excalibur Products (Sacramento, CA)	1,563	102	4,004	241	D	F	50	10	0	1975	Mfr. small appliances
86. Littlewood, Shajn (Wayne, PA)	1,532	101	2,415	148	E	C	41	5	0	1977	Consulting & software sales to banks
87. Demaco (Ponce, PR)	1,524	101	2,842	175	B	C	200	14	0	1978	Indus. & pharm. plants
88. Environmental Resources Mgt. (West Chester, PA)	1,520	101	5,155	318	D	C	59	8	0	1977	Environmental consulting engineers
89. P E Systems (227) (Alexandria, VA)	1,519	101	9,071	560	D	C	110	25	0	1971	Communication systems
90. Execucom Systems (Austin, TX)	1,519	101	19,261	1,190	D	A	217	35	0	1975	Computer software
91. Campmor (Paramus, NJ)	1,500	100	4,400	275	D	F	35	3	0	1977	Mail-order camping goods
92. Action Packets (Ocala, FL)	1,467	99	1,567	100	D	D	14	3	0	1976	Space-related consumer products
93. Blue Dolphin Enterprises (252) (San Diego, CA)	1,454	99	3,170	204	C	C	29	5	0	1972	Comic-book publisher & distributor
94. K&B Engineering (Santa Ana, CA)	1,453	99	4,443	286	B	B	250	70	2	1972	CATV telecommunication engineering
95. Markatron (Norcross, GA)	1,426	98	1,752	115	C	F	8	1	0	1978	Mfr./dist. trademarked collectibles

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	Percent increase	Compound annual rate			'82	'78	'82	'78			
96. Vital Signs (54) (East Rutherford, NJ)	1,420	97	8,756	576	C	D	30	5	0	1972	Wholesale medical products
97. Kappler Disposables (Guntersville, AL)	1,415	97	3,787	250	D	C	75	25	0	1976	Mfr. disposable industrial clothing
98. Univox California (90) (Los Angeles, CA)	1,389	96	14,833	996	B	D	206	42	0	1970	Electronics & water purification equip.
99. Datamaxx USA (85) (Tallahassee, FL)	1,388	96	7,657	514	E	F	59	12	0	1973	Computer peripherals sales & dvlpment.
100. B. W. Levy Security Consultants (76) (Chicago, IL)	1,378	96	2,217	150	B	A	110	20	0	1975	Security consulting & services
101. Moss Brown & Co. (Alexandria, VA)	1,374	96	2,914	198	D	F	19	6	0	1977	Running & outdoor gear sales
102. Katek (75) (Middlesex, NJ)	1,345	95	3,772	261	C	C	186	12	0	1975	CATV subscriber terminals services
103. Auto Line Manufacturing (103) (Westbury, NY)	1,338	95	11,500	800	C	C	200	30	0	1977	Mfr./dist. auto parts
104. Virginia Textiles (83) (Richmond, VA)	1,329	94	3,692	258	D	D	42	3	3	1976	Imprinted sportswear
105. FTZ Industries (Simpsonville, SC)	1,326	94	1,438	101	C	F	12	6	0	1977	Electr. products for transportation
106. Neutron Industries (Torrance, CA)	1,305	94	1,475	105	D	F	29	5	0	1978	Maintenance products
107. Image Stream (Los Angeles, CA)	1,304	94	1,966	140	D	A	15	4	0	1978	Audio/visual productions
108. SAS Institute (46) (Cary, NC)	1,301	93	18,494	1,320	B	B	210	21	0	1976	Computer software
109. Parker Construction (45) (Charleston, SC)	1,300	93	5,483	392	D	C	100	4	0	1976	General contracting
110. Hall Real Estate Group (Dallas, TX)	1285	93	17,301	1,249	A	A	818	22	0	1968	Real estate management
111. Alamo Consulting Group (133) (Walnut Creek, CA)	1,284	93	2,118	153	A	C	17	1	1	1976	Management, development & training
112. General Communications (Denver, CO)	1,282	93	1,439	104	D	F	30	14	3	1978	Magazine publisher
113. Time Systems (Phoenix, AZ)	1,270	92	1,438	105	B	E	14	4	0	1978	Time-management training
114. Prime Resources (Stamford, CT)	1266	92	1,666	122	B	B	24	1	1	1978	Specialty advertising products
115. Outlook Graphics (Neenah, WI)	1264	92	3,076	226	D	F	92	19	2	1977	Printing, publishing & bulk-mailing
116. Production Mgt. (Harvey, LA)	1,263	92	21,460	1,574	D	F	270	50	0	1971	Oil & gas services
117. E.M.D.S. (Gaithersburg, MD)	1,257	92	1,417	104	C	D	38	3	0	1975	Magnetometers, electric design svs.
118. Texas Tumbleweed (14) (Houston, TX)	1,251	92	17,457	1,292	C	B	750	90	0	1977	Steakhouse restaurants
119. Columbia Data Products (35) (Columbia, MD)	1,234	91	9,422	706	D	C	150	25	0	1975	Mfr. computer & peripheral systems
120. State Machine Products (94) (Dry Ridge, KY)	1,231	91	5,498	413	C	C	103	24	0	1970	Lanterns, mess-kits & stoves for govt.
121. Wornick (124) (Burlingame, CA)	1,217	90	64,328	4,885	C	D	600	90	0	1977	Food processing & packaging
122. Delta Business Systems (21) (Orlando, FL)	1,212	90	8,879	677	D	C	165	25	0	1976	Office equipment
123. Diversified Systems (Indianapolis, IN)	1,204	90	1,500	115	C	E	28	3	0	1973	Electronic engineering service
124. Super Liquors (Framingham, MA)	1,203	90	1,307	100	D	F	2	1	0	1978	Retail wine & liquor
125. Whitehill Mfg. (Lima, PA)	1200	90	1,572	121	C	F	15	4	0	1978	Mfr. rope & cable
126. Cortec (St. Paul, MN)	1,197	90	1,958	151	A	E	20	1	1	1977	Mfr. chemicals & electronics
127. Petroleum Well Services (Sour Lake, TX)	1,194	90	5,533	427	D	B	92	12	1	1977	Oil & gas services
128. St. Lucie Paper & Packaging (Fort Pierce, FL)	1,188	89	1,298	101	D	F	10	4	0	1977	Wholesale dist. paper & packaging
129. Lender's Service (Pittsburgh, PA)	1,177	89	7,827	613	D	D	150	32	0	1967	Mortgage services
130. Tesaco (Georgetown, TX)	1175	89	6,418	504	E	C	144	25	0	1977	Electronics subcontractor

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	Percent increase	Compound annual rate			'82	'78	'82	'78			
131. Peter Piper (Phoenix, AZ)	1,172	89	13,004	1,022	B	B	275	40	1	1973	Pizza restaurants franchise
132. Vanner (Columbus, OH)	1,169	89	1,588	125	C	D	16	5	1	1977	Mfr. electronics products
133. Noel Joanna (Irvine, CA)	1,156	88	5,077	404	C	C	51	15	0	1970	Mfr. soft goods for infants
134. Telecommunications Spec. (82) (Houston, TX)	1,155	88	14,759	1,176	B	B	220	40	0	1974	Telecom. equip. sales & service
135. Richardson Equipment (Huntsville, AL)	1,155	88	4,346	346	F	E	18	5	0	1978	Dist. swimming pool supplies
136. Software Results (Columbus, OH)	1,153	88	2,099	168	B	D	20	8	0	1975	Datacomm. firmware dvlpmnt. & sales
137. Associated Packaging (Goodlettsville, TN)	1,136	88	4,133	334	D	D	15	3	1	1977	Dist. packaging materials
138. Brady Marketing (104) (Concord, CA)	1,133	87	11,100	900	D	D	11	3	0	1976	Market gourmet cookware
139. Central Mass Media (Worcester, MA)	1,132	87	1,320	107	D	F	40	6	0	1976	Publish regional periodicals
140. Brad Cable Electronics (Schenectady, NY)	1,131	87	3,040	247	B	D	85	15	0	1976	Mfr. cable TV components
141. Professional Temporary Serv. (Knoxville, TN)	1,126	87	4,156	339	C	C	14	2	1	1978	Temporary employment
142. Inland Associates (Olathe, KS)	1,126	87	11,766	960	A	A	19	3	0	1970	Dist. computer peripherals
143. Technology Transfer Inst. (135) (Santa Monica, CA)	1,122	87	2,846	233	A	A	5	2	0	1976	Computer ed. & consulting serv.
144. Padgett-Thompson (Overland Park, KS)	1,114	87	7,616	627	B	E	17	3	0	1978	Business training seminars
145. Web Printing Controls (204) (Elk Grove Village, IL)	1,113	87	3,918	323	D	D	75	10	0	1971	Mfr. electronic printing systems
146. Pacesetter Steel Service (Woodstock, GA)	1113	87	38,800	3,200	D	D	55	8	0	1977	Steel service center
147. Finals (55) (New York, NY)	1,112	87	4,900	404	A	D	40	5	0	1976	Mfr. & dist. sportswear
148. Professional Travel (Atlanta, GA)	1,109	86	16,199	1,339	F	F	90	3	0	1977	Travel services
149. Pronto Systems (Kansas City, KS)	1105	86	15,709	1,304	E	E	5	2	0	1970	Wholesale & retail petroleum
150. C. M. Mascolo (239) (Phoenix, AZ)	1100	86	4,800	400	C	C	3	3	0	1975	Commercial building contractor
151. Yankee Group (70) (Boston, MA)	1,100	86	7,800	650	A	A	52	3	0	1977	High-technology market analysis
152. American Passage Mktg. (95) (Seattle, WA)	1,098	86	4,714	394	D	E	75	5	2	1976	Direct marketing/mail order
153. Triton (Washington, DC)	1,089	86	2,550	214	D	C	40	2	0	1978	Management & government consultants
154. Twincraft (Winooski, VT)	1,083	85	5,655	478	D	F	140	27	0	1978	Mfr. fancy toilet soaps
155. LaMarca (155) (New York, NY)	1,072	85	20,385	1,739	B	B	23	3	0	1975	Advg., media & market commun. serv.
156. Data Electronics (81) (San Diego, CA)	1,062	85	24,095	2,074	B	C	419	107	0	1974	Mfr. magnetic tape drives
157. Court (Memphis, TN)	1,059	85	2,204	190	A	A	3	2	0	1976	Builder racquetball courts
158. John Nageldinger & Son (93) (West Babylon, NY)	1,059	84	3,800	328	D	F	24	11	1	1880	Mfr. respiratory therapy equip.
159. Morgan Mfr. (193) (Paris, IL)	1,056	84	4,540	393	B	A	17	7	1	1976	Mfr. pet-food flavors
160. Anderson Industries (Commerce City, CO)	1,052	84	1,789	155	C	F	33	11	0	1973	Mfr. commercial stairway systems
161. O'Donnell Organization (137) (New York, NY)	1,050	84	1,914	166	E	F	14	4	0	1976	Advertising, marketing, and PR
162. Early Winters (96) (Seattle, WA)	1,047	84	12,785	1,115	D	D	191	50	0	1973	Mfr. outdoor clothing & equip.
163. Research Plastics (207) (Salem, MA)	1,046	84	7,450	650	D	C	35	18	1	1973	Mfr. protective fabrics
164. Royal Waterbeds (Saint Louis, MO)	1,045	84	1,700	149	A	A	30	1	0	1977	Waterbeds specialty stores
165. Dobson & Associates (Washington, DC)	1,043	84	1,600	140	B	E	3	2	0	1978	Promotions, mktg., mgmt. meetings

* INC. estimate. A. 16% or more; B. 11% to 15%; C. 6% to 10%; D. 1% to 5%; E. Breakeven; F. Loss

Rank, company ('82 rank)	Sales Growth 1978-82		'82 sales ($000)	'78 sales ($000)	Profit range *		No. of employees		Acquisitions '78-'82	Date founded	Business description
	Percent increase	Compound annual rate			'82	'78	'82	'78			
166. **Gemini Laminating** (Beverly, MA)	1,040	84	6,063	532	C	F	95	25	0	1978	Flame & adhesive lamination
167. **American Agrisurance** (Council Bluffs, IA)	1,040	84	23,074	2,025	D	D	29	5	0	1977	Crop insurance sales
168. **Technology Constructors** (Denver, CO)	1,038	84	1,145	101	D	A	20	3	0	1978	General contractor
169. **Memphis Glove** (77) (Memphis, TN)	1,030	83	14,092	1,247	D	D	28	4	0	1974	Distributes work gloves
170. **Audio Command Systems** (Rockville Ctr., NY)	1,025	83	1,683	150	A	E	25	4	0	1978	Mfr. audio/visual systems
171. **CTEC** (Sacramento, CA)	1,021	83	4,622	412	D	C	97	5	0	1976	Mfr. chair lifts
172. **Transalaska Data Sys.** (152) (Anchorage, AK)	1,020	83	5,566	497	D	D	37	9	0	1973	Micros & datacommunications equip.
173. **Weekley Homes** (Houston, TX)	1,020	83	44,290	3,953	C	D	79	11	0	1976	Residential construction
174. **National Business Communic.** (68) (Pompano Beach, FL)	1,014	83	5,677	510	D	E	60	2	2	1975	Business telephone systems
175. **Sun Hill Industries** (29) (Stamford, CT)	1,013	83	7,144	642	A	A	38	5	0	1974	Mfr. holiday & stationery supplies
176. **Advanced Technology** (34) (McLean, VA)	1,012	83	41,764	3,756	D	C	920	140	0	1976	High-tech services
177. **D & D Services** (134) (Phenix City, AL)	1,006	82	2,592	234	D	C	275	45	0	1975	Service contractor
178. **Dilithium Press** (Beaverton, OR)	1,005	82	2,705	245	C	F	28	3	0	1976	Publish microcomputer books, software
179. **NEOPC** (176) (Leominster, MA)	997	82	5,486	500	C	D	25	4	0	1977	Natural foods distributor
180. **Crisstad Enterprises** (LaGrande, OR)	995	82	5,583	510	A	C	21	11	0	1974	Sales of logs & wood products
181. **Financial Associates** (Prairie Village, KS)	995	82	6,855	626	A	A	21	2	0	1976	Health insurance
182. **TABS Associates** (Baltimore, MD)	989	82	4,641	426	C	A	356	41	0	1977	Presort mail service
183. **Ugly Duckling Rent-A-Car Sys.** (Tucson, AZ)	984	81	16,500	1,522	E	E	11	2	0	1978	Used rental car franchising
184. **Viar** (Alexandria, VA)	984	81	4,416	407	D	C	46	11	0	1976	Computer software sys. devel.
185. **JBF Associates** (Knoxville, TN)	984	81	1,192	110	B	D	23	6	0	1977	Engineering consulting
186. **RAIL** (Towson, MD)	977	81	10,093	937	D	D	108	25	0	1970	Engineering & analytical serv.
187. **Sky Courier Network** (Reston, VA)	970	81	32,000	2,991	D	D	284	60	2	1977	Time-critical air courier service
188. **Bank Earnings** (69) (Atlanta, GA)	947	80	5,049	482	A	A	47	8	2	1976	Financial services
189. **One Pass** (211) (San Francisco, CA)	944	80	5,200	498	C	E	50	8	4	1977	Video productions
190. **Illuminations** (Cambridge, MA)	941	80	4,005	385	D	C	72	10	0	1973	Stationery, stickers & gift products
191. **Microtech Mfg.** (40) (Minneapolis, MN)	941	80	12,873	1,237	F	B	250	30	2	1973	Job shop, metal manufacturing
192. **Robelle Industries** (Stoughton, MA)	937	79	7,200	695	D	D	37	2	3	1976	Retail & truck leasing
193. **National Health Care Affiliates** (Buffalo, NY)	932	79	4,446	431	D	F	807	48	8	1977	Manages health-care facilities
194. **Polaris Vac-Sweep** (24) (San Marcos, CA)	930	79	13,972	1,356	C	A	87	17	0	1957	Automatic swimming-pool cleaners
195. **Branson Aircraft** (181) (Denver, CO)	929	79	3,190	310	A	A	75	12	0	1966	Mfr. custom aircraft equipment
196. **World Wide Chemicals** (41) (Indianapolis, IN)	920	79	3,183	312	D*	F	26	7	0	1977	Automotive reconditioning chemicals
197. **United Design** (Noble, OK)	917	79	1,387	136	C	A	65	7	0	1975	Mfr. giftware products
198. **Mini-Pak** (23) (New York, NY)	912	78	4,017	397	B	D	42	8	0	1976	Broadcast & advertising software sys.
199. **Indiana Records Managers** (Indianapolis, IN)	910	78	4,143	410	D	D	27	5	1	1976	Retail office equipment
200. **Ashcraft Trucking** (79) (Shelbyville, IN)	904	78	5,087	507	D	C	100	20	0	1970	Freight transportation

* INC estimate A 16% or more B 11% to 15% C 6% to 10% D 1% to 5% E Breakeven F Loss

Rank, company ('82 rank)	Sales Growth 1978–82		'82 sales ($000)	'78 sales ($000)	Profit range*		No. of employees		Acquisitions '78-'82	Date founded	Business description
	Percent increase	Compound annual rate			'82	'78	'82	'78			
201. Interphase (Dallas, TX)	900	78	2,378	238	A	A	25	5	0	1974	Mfr. micro peripheral controllers
202. Environ Enterprises (Cincinnati, OH)	886	77	2,683	272	D	D	30	3	0	1977	General contractors
203. Flight International Group (60) (Atlanta, GA)	884	77	13,805	1,402	C	A	150	18	2	1976	Aviation services
204. Cormed (187) (Medina, NY)	879	77	2,014	206	C	D	12	1	0	1976	Mfr./dist. medical devices
205. Photogenesis (San Antonio, TX)	877	77	7,230	740	D	E	37	20	0	1973	Operate retail camera stores
206. Jewell Building Systems (175) (Dallas, NC)	875	77	2,702	277	F	D	32	5	0	1977	Mfr. metal prefab buildings
207. Essex Grain Products (King of Prussia, PA)	874	77	17,980	1,846	D	D	45	6	2	1972	Dist. food ingredients
208. Trade West (Honolulu, HI)	870	76	1,287	133	F	F	12	7	0	1978	Dist. gifts & souvenirs
209. Pied Piper Industries (Cleveland, OH)	868	76	2,606	269	D	B	15	5	0	1972	Electr. bug killers, car secur. sys.
210. Qualimetrics (Highlands, CA)	863	76	7,449	774	C	F	71	9	1	1977	Mfr. geophysical intruments
211. Pelican Products (Torrance, CA)	863	76	1,074	112	B	D	7	1	0	1976	Mfr. scuba & camera accessories
212. Wizard Publications (Torrance, CA)	860	76	1,804	188	D	D	14	6	0	1976	Magazine publisher
213. Jack Young Associates (St. Albans, NY)	851	76	5,489	577	D	F	160	2	0	1961	Mfr. sweaters
214. Uniq Digital Technologies (128) (Batavia, IL)	849	76	3,838	404	C	C	45	12	0	1975	Office systems development
215. RSR Wholesale Guns (Orlando, FL)	843	75	20,652	2,191	D	D	48	5	0	1977	Wholesale guns
216. Metro Information Serv. (105) (Virginia Beach, VA)	839	75	1,101	117	B	C	41	1	0	1973	Computer software serv. & products
217. Willis (51) (Houston, TX)	838	75	21,480	2,290	D	D	120	16	2	1976	Personnel services
218. Telco Research (Nashville, TN)	837	75	2,268	242	A	E	39	4	0	1977	Telecomm. software & consulting
219. RT Cable (Orange, NJ)	834	75	9,561	1,023	D	D	100	20	0	1972	Cable TV installation
220. Sport Graphics (Cranston, RI)	833	75	2,800	300	C	D	50	30	0	1977	Mfr./dist. sport bags
221. American Technical Serv. (130) (Tucker, GA)	824	74	19,243	2,082	D	C	300	60	1	1975	Instrument control systems
222. Intertrade Industries (Huntington Beach, CA)	819	74	1,424	155	B	D	34	7	1	1975	Mfr. marine equipment
223. Signal Technology (Goleta, CA)	817	74	2,541	277	D	D	18	4	0	1977	Software development & sales
224. Nutech (184) (San Jose, CA)	817	74	59,600	6,500	B	C	625	108	1	1974	Engineering services
225. Alimar et Cie (Scottsdale, AZ)	817	74	1,100	120	B	C	2	2	0	1977	Wine importer
226. Protec Management Systems (Lafayette, CA)	810	74	931	102	A	B	16	3	0	1977	Security & mgmt. control systems
227. Florida Food Industries (4) (Winter Park, FL)	806	74	8,796	970	B	C	347	51	0	1977	Restaurant franchisee
228. A. J. Reynolds (Torrance, CA)	806	74	1,401	155	D	F	10	5	0	1977	Dist. industrial products
229. Hillside Bedding (Mount Vernon, NY)	805	73	19,000	2,100	C	C	58	9	0	1973	Retail bedding stores
230. Cooper Consultants (Portland, OR)	803	73	2,329	258	C	D	45	13	0	1976	Construction design & mgmt. services
231. Tool King (Denver, CO)	802	73	4,699	521	E	E	47	8	0	1978	Retail hardware stores
232. Eagle Security Systems (Aurora, CO)	801	73	2,108	234	F	F	297	40	0	1977	Security services
233. Betac (Arlington, VA)	800	73	9,000	1,000	D	C	139	32	0	1977	Systems engineering
234. Cosain (Johnson City, NY)	793	73	5,746	643	E	F	6	2	2	1978	Dist. N.Y. State lottery tickets
235. Graham Brake & Diesel (62) (Chatsworth, CA)	792	73	6,100	684	D	D	31	5	1	1977	Dist. bus & diesel parts

* INC. estimate. A. 16% or more; B. 11% to 15%; C. 6% to 10%; D. 1% to 5%; E. Breakeven, F. Loss

Rank, company ('82 rank)	Sales Growth 1978–82		'82 sales ($000)	'78 sales ($000)	Profit range*		No. of employees		Acquisitions '78-'82	Date founded	Business description
	Percent increase	Compound annual rate			'82	'78	'82	'78			
236. Allegro Services (195) (Tucker, GA)	791	73	8,206	921	D	D	87	20	0	1975	Dist. fund-raising merchandise
237. Attridge Heating & Cooling (210) (Tempe, AZ)	788	73	1,522	171	D	C	14	5	0	1975	Mfr. evaporative cooling sys.
238. Saturn Electric (San Diego, CA)	773	72	2,244	257	D	A	30	4	0	1963	Electrical constr. contractor
239. Wheeled Coach (Winter Park, FL)	771	72	21,837	2,506	D	D	220	27	0	1976	Mfr. ambulances
240. Cornell Computer (New York, NY)	764	71	10,707	1,239	D	D	175	25	0	1972	Computer consulting
241. Clock Stoppers (San Rafael, CA)	763	71	943	109	D	F	30	4	0	1977	Portrait photography
242. Bio-Analytics (Palm City, FL)	757	71	883	103	C	F	21	6	0	1971	Mfr. medical equipment
243. Administrative Information Sys. (Bridgewater, NJ)	756	71	1,073	125	A	F	8	2	0	1977	Medical software & hardware sys.
244. Seko Air Freight (99) (Schiller Park, IL)	753	71	11,310	1,326	D	D	54	15	0	1976	Air freight
245. Executone Telecommunications (Reading, PA)	751	71	2,418	284	D	F	31	6	1	1945	Telephone equipment sales
246. Kirke-Van Orsdel (53) (Des Moines, IA)	749	71	15,939	1,877	D	F	352	76	4	1974	Insurance broker/administrator
247. Deerfield Communications (New York, NY)	744	70	38,000	4,500	A	A	15	6	0	1974	Asset management barter
248. PCI Energy Services (Lake Bluff, IL)	744	70	8,143	965	B	A	125	8	0	1971	Nuclear power plant maintenance
249. ACSIS (56) (New York, NY)	736	70	4,181	500	D	C	100	40	0	1975	Computer consultants
250. Houston Wire & Cable (Houston, TX)	736	70	61,606	7,370	D	D	135	40	0	1975	Dist. electrical wire & cable
251. Computer Maintenance (Secaucus, NJ)	731	70	3,495	421	D	C	31	5	0	1977	Service computers, sell peripherals
252. TeleCheck Texas(52) (Houston, TX)	726	70	4,960	600	C	F	111	24	0	1977	Check & credit authorization
253. Windham(230) (Pensacola, FL)	722	69	37,000	4,500	A	A	35	15	20	1973	Owner/operator real estate
254. New England Soy Dairy (Greenfield, MA)	720	69	1,854	226	D	D	30	8	0	1977	Soy-food processing
255. Marine Structural Applications (Dumfries, VA)	720	69	3,257	397	D	B	30	8	0	1978	Marine construction
256. Mountain Air Delivery (Reno, NV)	718	69	1,395	171	D	F	28	7	0	1975	Transportation services
257. Wier & Associates (Arlington, TX)	717	69	1,313	161	D	C	20	3	0	1978	Civil-engineering consulting
258. Diet Center (Rexburg, ID)	716	69	26,285	3,223	A	A	240	23	1	1972	Franchise sales & support
259. Corporate Consulting & Devel. (Res. Triangle Pk., NC)	715	69	1,881	231	C	C	38	19	0	1972	Nuclear equip. quality control
260. Best Choice (Hershey, PA)	711	69	1,224	151	D	E	10	3	0	1972	Mail-order & retail sporting goods
261. Luckwood (Gladewater, TX)	709	69	2,179	269	D	C	25	7	0	1977	Excavating & paving contracting
262. American Office Equipment (Westmont, IL)	708	69	7,488	926	D	D	128	33	0	1978	Dist.office equipment
263. Resistance Technology (Arden Hills, MN)	706	69	3,800	471	F	F	126	27	0	1977	Mfr. custom electrical components
264. Information Bureau (380) (Dallas, TX)	700	68	4,000	500	A	A	85	12	0	1972	Investment computer serv.
265. L. J. Russo Ins. Serv. (153) (Emeryville, CA)	696	68	5,626	707	D	C	175	30	0	1973	Claims administrative serv.
266. Heurikon (Madison, WI)	696	68	1,670	210	C	E	37	8	0	1972	Mfr. microcomputer prod. & sys.
267. TravelCenter (Anchorage, AK)	691	68	53,000	6,700	D	D	215	35	0	1946	Travel services
268. Dorman Bogdonoff (91) (Andover, MA)	689	68	4,016	509	D	F	95	24	0	1977	Mfr. membrane keyboards
269. Gorham Model Products (Calabasas, CA)	686	67	795	101	D	E	10	1	0	1978	Radio-controlled model helicopters
270. Marketing Communications (Lenexa, KS)	685	65	5,634	718	A	B	59	18	0	1969	Direct-mail advertising

* INC. estimate: A. 16% or more; B. 11% to 15%; C. 6% to 10%; D. 1% to 5%; E. Breakeven, F. Loss

Chart continues on page 112

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Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Sales Growth 1978–82 Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range* '82	Profit range* '78	No. of employees '82	No. of employees '78	Acquisitions '78-'82	Date founded	Business description
271. Polymer Devel. Labs (215) (Orange, CA)	678	67	10,275	1,321	D	D	30	6	1	1975	Polyurethane resin chemical sys.
272. Computer Science Press (196) (Rockville, MD)	677	67	[illegible],305	168	D	E	14	4	0	1974	Science publishers
273. Euro Rep (Tustin, CA)	673	67	989	128	D	F	4	2	1	1977	Imports auto parts, racing apparel
274. Genie Filter (Dansville, NY)	672	67	2,339	303	A	C	67	11	1	1973	Mfr. industrial filters
275. Dr. Cully's Cartage (185) (Hunt Valley, MD)	669	67	2,231	290	D	E	47	9	0	1973	Trucking & warehousing
276. Dynamic Systems (McLean, VA)	668	66	5,419	706	D	D	110	4	0	1977	Engineering mgmt. consultants
277. Systems Strategies (102) (New York, NY)	663	66	4,221	553	D	C	66	21	0	1976	Computer software
278. Micromedia Marketing (Pasadena, CA)	658	66	3,066	405	D	D	14	5	0	1976	Dist. computer books & software
279. Mast Realty Group (New York, NY)	657	66	13,250	1,750	B	F	80	3	23	1977	Real estate acquis., mgmt. & sales
280. Promedics Data (Mountain View, CA)	655	66	1,279	169	F	E	16	4	0	1977	Turnkey health-care computer sys.
281. Iris Arc (Santa Barbara, CA)	655	66	2,518	334	D	C	36	14	0	1976	Mfr. & import crystal giftware
282. Endless Vacation International (Indianapolis, IN)	653	66	11,600	1,540	D	D	263	42	0	1974	Vacation exchange & travel serv.
283. Gulf States Mortgage (Atlanta, GA)	651	66	2,741	365	A	F	54	9	1	1962	Mortgage services
284. Elgem Sales & Services (Brooklyn, NY)	650	65	3,000	400	A	C	50	10	0	1975	Install, maintain office furniture
285. Northern Wire & Cable (Troy, MI)	650	65	14,048	1,873	D	C	73	20	0	1976	Dist. wire & cable
286. Handling Systems Engineering (Jacksonville, FL)	649	65	2,599	347	D	D	15	3	0	1978	Materials handling & equip. dist.
287. Midstate Electronics (Middletown, CT)	645	65	823	111	D	D	7	2	0	1977	Electronic distributor
288. Paulsel Lumber (Fort Worth, TX)	642	65	5,115	689	C	A	10	5	0	1945	Wholesale lumber & investments
289. Interwest Communic. (138) (Denver, CO)	638	66	6,825	925	B	A	60	4	5	1975	Private telephone company
290. Parmed Pharmaceuticals (Niagara Falls, NY)	637	65	6,994	949	D	D	65	14	0	1968	Dist. generic pharmaceuticals
291. Gator Transportation (202) (Orlando, FL)	636	65	4,590	624	B	B	57	21	3	1974	Cable TV & transportation
292. Commercial Prpty. Serv. (109) (Cleveland, OH)	635	65	17,425	2,369	D	C	1500	350	3	1974	Building maintenance & security
293. International Microcircuits (Santa Clara, CA)	635	65	9,895	1,346	A	D	60	17	0	1972	Custom integrated circuits
294. PBS Computing (136) (St. Paul, MN)	631	64	3,457	473	F	D	50	9	1	1969	Data services & turnkey computer sys.
295. Dixie Auto Transport (Jacksonville, FL)	623	64	21,490	2,973	D	E	200	32	4	1939	Automobile transportation
296. MBT Associates (303) (San Francisco, CA)	622	64	5,113	708	C	C	94	28	0	1954	Architecture
297. Advanced System Applications (Glendale Heights, IL)	622	64	11,340	1,571	B	B	227	32	0	1977	Insurance computer sys.
298. Executone Telecom (Rochester, NY)	619	64	2,227	310	D	D	32	13	0	1976	Telephone sys. design, sale & serv.
299. Elographics (Oak Ridge, TN)	619	63	1,770	246	A	A	35	8	0	1971	Computer peripherals
300. Rosenthal Construction (Barton, VT)	616	64	2,437	340	D	D	55	[illegible]0	0	1977	General contractor
301. D.R.I. Industries (349) (Bloomington, MN)	616	64	55,100	7,700	A*	B*	180	110	0	1975	Mail-order hardware
302. Conference Management (49) (Norwalk, CT)	616	64	7,220	1,009	C	C	36	9	0	1976	Manages trade shows & conferences
303. Intertec Components (Longwood, FL)	615	64	1,870	261	E	B	13	3	0	1976	Dist. electronic products
304. Ruiz Food Products (172) (Tulare, CA)	614	63	9,721	1,361	C	D	204	29	0	1964	Processes frozen Mexican food
305. Starving Students (Los Angeles, CA)	612	63	2,868	403	C*	D	200	25	0	1973	Moving companies

* INC. estimate. A: 16% or more; B: 11% to 15%; C: 6% to 10%; D: 1% to 5%; E: Breakeven; F: Loss

Rank, company ('82 rank)	Sales Growth 1978–82		'82 sales	'78 sales	Profit range*		No. of employees		Acquisitions	Date	Business description
	Percent increase	Compound annual rate	($000)	($000)	'82	'78	'82	'78	'78-'82	founded	
306. Hidden Villa Ranch (Placentia, CA)	610	63	7,100	1,000	D	D	40	3	0	1977	Wholesale dist. eggs & cheese
307. Jeffrey Norton Publishers (Guilford, CT)	609	63	1,922	271	E	B	25	4	1	1972	Audio/visual instruct. publishing
308. Scipar (Williamsville, NY)	609	63	2,408	340	D	D	29	6	0	1975	Electronics R&D
309. Cyborg Systems (Chicago, IL)	605	63	6,101	865	B	C	51	9	0	1974	Applications software licensing
310. Lawson Associates (38) (Minneapolis, MN)	603	63	5,796	824	D	B	100	17	0	1975	Computer software
311. Wiedemann & Johnson(317) (Dallas, TX)	603	63	9,362	1,332	B	B	15	4	0	1967	Design, mkt., admin. benefit plans
312. Theriault's (191) (Annapolis, MD)	602	63	4,405	627	C	D	21	5	0	1977	Auction house
313. R&J Corvette Parts (Anaheim, CA)	599	63	1,271	182	B	C	5	2	1	1978	Retail sales & mfr. Corvette parts
314. Commer. Glass & Glazing (132) (Mesa, AZ)	595	62	4,804	692	D	C	77	18	1	1975	Glazing contractor
315. Webco Press (Lapeer, MI)	594	62	4,228	609	C	B	38	23	0	1969	Commercial printing
316. Delphi Glass (78) (Lansing, MI)	589	62	2,774	402	C	A	53	6	0	1976	Mail-order stained-glass supplies
317. Chioke International (New York, NY)	589	62	82,677	12,000	D	E	16	16	0	1970	Defense contracting
318. Megas Manufacturing (Cleveland, OH)	586	62	5,874	856	C	C	60	25	0	1976	Mfr. health & beauty aids
319. North American T.B.A. (Philadelphia, PA)	586	62	17,148	2,500	E	D	55	15	3	1949	Automotive aftermarket distributor
320. ACE Equipment Rentals (Baton Rouge, LA)	582	62	1,078	158	D	B	8	1	0	1978	Industrial rental equipment
321. Metaltech (257) (Kirkwood, MO)	578	61	2,851	421	B	A	11	4	0	1976	Mfr. rain-carrying goods
322. San Antonio Developers (San Antonio, TX)	577	61	1,018	150	C	C	6	3	0	1978	Mfr. specialty coatings
323. All American Turf Beauty (Winterset, IA)	576	61	693	103	C	D	15	4	0	1976	Lawn service representative
324. Setpoint (282) (Houston, TX)	576	61	7,300	1,080	C	C	93	25	0	1977	Eng., computer control applications
325. Amex Systems (Hawthorne, CA)	575	61	58,591	8,675	D	D	664	307	0	1971	Mfr. electronic equip. & sys.
326. Red Calliope & Associates (57) (Los Angeles, CA)	572	61	6,257	931	B	A	34	10	0	1969	Mfr. infant bedding
327. Paul Newman's Coney Is. Restaurant (Alamosa, CO)	569	61	15,109	2,257	A	C	983	26	1	1976	Operate & franchise restaurants
328. Altus (San Jose, CA)	569	61	5,642	843	F	F	330	30	1	1976	Mfr. lithium batteries
329. Jackalope Pottery (Santa Fe, NM)	567	61	1,060	159	C	B	15	4	0	1976	Retail & wholesale imports
330. Oxford Software (203) (Hasbrouck Heights, NJ)	566	61	8,737	1,312	C	E	81	21	0	1974	Computer software devel. & sales
331. Southern Accents Magazine (Atlanta, GA)	566	61	2,959	444	A	F	9	5	0	1977	Magazine publisher
332. Business Planning Associates (Lancaster, PA)	564	61	996	150	D	D	21	4	0	1977	Insurance
333. Livingston Office Products (Tampa, FL)	562	60	8,081	1,220	C	D	19	15	0	1976	Contract business furniture
334. David Boland (107) (Titusville, FL)	561	60	6,416	971	D	C	60	20	0	1976	General contractor
335. Cheese & Specialty Foods (Denver, CO)	560	60	7,578	1,148	D	D	20	7	0	1977	Importer/dist. specialty foods
336. Link-Allen & Associates (San Mateo, CA)	558	60	736	112	F	F	19	5	0	1976	Insurance
337. Thermal Systems (Salt Lake City, UT)	557	60	9,200	1,400	C	C	77	14	0	1977	Mfr. urethane foam insulation
338. Automation Electronics (155) (Oakland, CA)	556	60	8,191	1,248	B	C	120	40	0	1976	Mfr./retail telecommun. equip.
339. Investors Management (339) (Raleigh, NC)	554	60	161,733	24,733	C	C	10,000	1,300	3	1971	Restaurant management
340. Flexible Packaging (Hayward, CA)	552	60	2,933	450	D	D	70	3	1	1978	Computer packaging material

* INC. estimate. A: 16% or more; B: 11% to 15%; C: 6% to 10%; D: 1% to 5%; E: Breakeven. F: Loss

Rank, company ('82 rank)	Sales Growth 1978–82		'82 sales ($000)	'78 sales ($000)	Profit range *		No. of employees		Acquisitions '78-'82	Date founded	Business description
	Percent increase	Compound annual rate			'82	'78	'82	'78			
341. Conservatree Paper (San Francisco, CA)	551	60	3,683	566	E	F	7	4	0	1977	Mfr./dist. recycled paper products
342. Houston Copy (129) (New York, NY)	550	60	1,461	225	E	C	25	10	0	1973	Printing, Xerox & typing serv.
343. Cameo Fashions Access. (270) (Beverly Hills, CA)	546	60	3,974	613	A	A	257	82	0	1977	Wholesale jewelry
344. Granite Financial (126) (Sacramento, CA)	548	60	17,029	2,629	C	D	232	45	0	1977	Mortgage banking services
345. Integral Systems (Walnut Creek, CA)	545	59	7,100	1,100	C	C	85	22	1	1972	Devel./sales software products
346. Harmony Foods (92) (Santa Cruz, CA)	545	59	29,286	4,538	D	D	200	50	0	1969	Natural snacks & confectionery foods
347. Systems Architects (256) (Randolph, MA)	543	59	8,668	1,348	C	C	275	35	0	1970	Computer sys. software prod.
348. Sachs/Freeman Assoc. (250) (Bowie, MD)	543	59	6,314	982	D	D	96	38	0	1969	Consulting/engineering
349. Thomas J. Doty's ImageMakers (343) (Santa Barbara, CA)	541	59	1,384	216	C	B	21	4	2	1975	Advertising & photo finishing
350. American Intl. Insurance (455) (Creve Coeur, MO)	540	59	1,920	300	E	D	8	3	1	1975	General insurance agency
351. Aquidneck Data (39) (Middletown, RI)	539	59	6,804	1,065	D	C	183	38	0	1976	Computer software development
352. HTC (84) (Concord, MA)	539	59	2,252	353	D	B	35	5	0	1974	Mfr. vapor-phase soldering sys.
353. Little Barn (248) (Little Rock, AR)	534	59	1,675	264	B	C	23	5	0	1967	Retail furniture, waterbeds
354. Source Northwest (Woodinville, WA)	533	59	3,338	527	D	C	19	7	0	1978	Dist. hardware & housewares
355. Munsen's Discovery Ent. (245) (Hinsdale, IL)	531	58	12,038	1,907	E	F	140	21	4	1974	Senior citizens' tours
356. Contract Furnish. & Sys. (186) (New York, NY)	531	58	14,498	2,297	A	A	59	9	2	1978	Office furniture dealer
357. Quintron (448) (Quincy, IL)	531	58	8,618	1,366	C	F	128	30	0	1970	Mfr. radio transmitters
358. Leichtung (233) (Cleveland, OH)	530	58	8,566	1,360	C	C	55	8	0	1974	Mail-order tools
359. Lufran (Macedonia, OH)	530	58	2,053	326	A	A	37	14	0	1974	Mfr. chemical processing equipment
360. Urban Electrical (Methuen, MA)	530	58	3,670	583	D	E	50	20	0	1960	Electrical construction contractor
361. Skybird Publishing (New Orleans, LA)	529	58	1,697	270	B	C	13	7	0	1974	Trade magazine publisher
362. Ad-Tek Engineering Serv. (71) (Irvine, CA)	528	58	3,776	601	D	D	68	18	0	1974	Temporary technical personnel
363. Ross Systems (Palo Alto, CA)	527	58	5,917	943	F	B	82	13	0	1972	Financial computer software
364. Sybex (Berkeley, CA)	525	58	5,000	800	C	C	60	35	0	1976	Computer book publisher
365. Industrial Training (67) (Rockville, MD)	524	58	3,211	515	C	D	35	12	0	1977	Multimedia indust. training programs
366. Graphic Technology (150) (Olathe, KS)	522	58	5,061	813	C	F	55	20	0	1976	Mfr. bar-coded labels
367. Pertron Controls (125) (Canoga Park, CA)	522	58	5,005	805	D	B	54	8	0	1975	Mfr. microprocessor welding controls
368. Allen Corporation of America (Alexandria, VA)	521	58	6,464	1,041	D	C	72	15	0	1975	Human factors engineering
369. Environmental Earthscapes (Tucson, AZ)	520	58	1,803	291	C	C	65	12	0	1976	Commercial landscaping
370. Norwich Togs (Sandwich, NY)	518	58	3,683	596	D	F	50	14	0	1976	Mfr. apparel
371. KMCO (Crosby, TX)	518	58	16,014	2,593	C	A	80	30	0	1975	Specialty chemicals, processing
372. Vie de France (Vienna, VA)	515	57	28,300	4,600	C	C	1030	140	1	1972	Bakery & restaurant chain
373. American Business Lists (376) (Omaha, NE)	514	57	5,650	920	B*	C*	120	10	0	1972	Business list compiler
374. Morino Associates (290) (Vienna, VA)	513	57	8,232	1,342	A	B	61	16	0	1973	Develops & markets system software
375. Winona Knitting Mills (Winona, MN)	513	57	8,701	1,419	D	D	55	11	0	1977	Retail knitted apparel

* INC. estimate: A. 16% or more; B. 11% to 15%; C. 6% to 10%; D. 1% to 5%; E. Breakeven, F. Loss

Rank, company ('82 rank)	Sales Growth 1978–82		'82 sales ($000)	'78 sales ($000)	Profit range*		No. of employees		Acquisitions '78-'82	Date founded	Business description
	Percent increase	Compound annual rate			'82	'78	'82	'78			
376. Cyber Systems (Anaheim, CA)	513	57	4,900	800	B	F	45	14	0	1977	Computer-based data acquisition sys.
377. Nucleus (266) (Oak Ridge, TN)	511	57	4,531	741	A	A	78	51	2	1968	Design/mfr. nuclear instrumentation
378. Floscan Instrument (Seattle, WA)	511	57	3,888	636	D	A	70	10	0	1969	Mfr. fuel-flow sensors
379. Bomark Group (165) (Houston, TX)	511	57	4,814	788	C	C	56	8	1	1975	Wholesale & mfr. sportswear
380. Organizational Dynamics (380) (Burlington, MA)	510	57	2,318	380	B	E	28	5	0	1970	Management consultants
381. Pacific Envelope (229) (Anaheim, CA)	508	57	2,852	469	C	C	22	8	1	1959	Mfr. envelopes
382. Webb, Murray & Assoc. (169) (La Porte, TX)	508	57	2,540	418	C	E	52	14	0	1974	Safety & fire protection engineering
383. American Marketing Services (Ft. Lauderdale, FL)	507	57	10,705	1,763	D	F	100	20	0	1978	Telemarketing & advertising
384. W-B Pump & Supply (31) (Pampa, TX)	507	57	29,757	4,903	D	D	68	10	0	1971	Oil-field production equip. sales
385. JBM Electronics (St. Louis, MO)	507	57	1,177	194	A	C	17	10	0	1975	Microprocessor-based commun. equip.
386. R&E Electronics (Wilmington, NC)	506	57	1,164	192	D	F	13	5	0	1952	Specialized telecommunications sys.
387. Star Pak Solar Systems (Novi, MI)	504	57	1,356	224	D	D	32	7	0	1975	Mfr., sell & install solar heaters
388. J. A. Cornwell (7) (Pasco, WA)	503	57	20,560	3,408	D	D	9	9	0	1975	Construction management
389. Wilson Laboratories (Orange, CA)	500	57	3,024	504	B	B	33	9	0	1973	Mfr. peripheral test equipment
390. Sage Systems (409) (Rockville, MD)	499	56	5,009	836	C	C	101	20	3	1973	Computer software products
391. Starmark (Chicago, IL)	498	56	1,972	330	C	B	8	2	0	1978	Advertising/marketing
392. North Star Computers (179) (San Leandro, CA)	496	56	41,142	6,900	C	A	335	36	0	1976	Mfr. microcomputers
393. Corpane Industries (344) (Louisville, KY)	496	56	2,028	340	A	E	46	12	0	1973	Mfr. ultrasonic systems
394. Creative Mgt. Systems (465) (McLean, VA)	495	56	632	106	C	D	16	7	0	1976	Telecommunications systems
395. Perfusion Services (123) (Brighton, MI)	494	56	5,822	980	C	C	70	8	0	1968	Medical services
396. Data Translation (141) (Marlboro, MA)	494	56	8,085	1,362	D	D	115	38	0	1973	Microcomputer data acquisition sys.
397. Queen Oxygen (213) (Worthington, OH)	493	56	3,567	601	D	D	22	6	0	1975	Welding supply distributor
398. Horwath Electric Motors (266) (Erie, PA)	493	56	771	130	C	B	15	6	0	1950	Electric motor repair & sales
399. Foam Systems (Riverside, CA)	491	56	18,794	3,180	D	D	100	14	1	1975	Mfr. rigid polyurethane foam
400. Institute for Resource Mgmt. (Annapolis, MD)	487	56	19,607	3,339	D	F	24	12	0	1967	Nuclear instrument rental & sales
401. Research, Analysis & Mgmt. (209) (Rockville, MD)	487	56	5,542	944	D	D	92	35	0	1975	Marine engineering & project mgmt.
402. EDM Precision Products (299) (Ft. Lauderdale, FL)	487	56	1,434	244	D	B	35	15	0	1974	Aeorspace contract manufacturer
403. SLM Instruments (364) (Urbana, IL)	486	56	3,900	665	C	C	39	14	1	1973	Mfr. analytical instruments
404. American Med. Therapeutics (Norwood, MA)	485	56	1,366	233	D	B	11	3	0	1977	Respiratory home-care, hospital sales
405. Robert E. Bayley Construction (Seattle, WA)	483	55	39,149	6,718	D	D	275	45	0	1963	Commercial & industrial construction
406. Sunshine Beauty Supplies (Grenada Hills, CA)	481	55	2,673	460	C	C	38	11	0	1974	Retail/wholesale beauty supplies
407. Pretty Neat Industries (199) (Pompano Beach, FL)	481	55	5,159	888	A	A	130	15	0	1977	Mfr. cosmetic organizers
408. Mid City Web (423) (Chicago, IL)	480	55	5,800	1,000	C	F	100	25	0	1976	High-volume printing
409. W. B. Wood (Orange, NJ)	479	55	24,900	4,297	D	D	120	35	0	1905	Business furniture
410. Western Controls (Salt Lake City, UT)	478	55	1,036	179	D	D	5	2	0	1977	Electrical distributor

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Rank, company ('82 rank)	Sales Growth 1978–82		'82 sales	'78 sales	Profit range*		No. of employees		Acqui-sitions	Date	
	Percent increase	Compound annual rate	($000)	($000)	'82	'78	'82	'78	'78-'82	founded	Business description
411. Holiday of Orlando (Orlando, FL)	478	55	8,393	1,453	C	D	29	11	0	1978	Recreational-vehicle dealer
412. Eastern Business Machines (Greenbelt, MD)	476	55	5,028	873	C	D	112	30	0	1954	Training support on business systems
413. Pillsbury Chemical & Oil (88) (Detroit, MI)	475	55	5,750	1,000	C	C	48	18	2	1924	Mfr. industrial lubricants, chemicals
414. Stoops Express (182) (Anderson, IN)	474	55	20,436	3,560	D	D	300	50	1	1976	Interstate regulated motor carrier
415. GNP (Pasadena, CA)	471	55	590	103	B	C	6	3	0	1977	Mfr. audio/video computer sys.
416. Winn Galleries (Seattle, WA)	470	55	1,278	224	D	D	13	2	0	1977	Publish & dist. prints & art books
417. Los Alamos Technical (110) (Los Alamos, NM)	470	55	6,040	1,060	D	F	115	18	0	1976	High-tech professional consulting
418. Vocational Training Ctr. (358) (Saint Louis, MO)	470	54	1,405	247	D	D	60	12	0	1961	Private trade school
419. North American Vending (Lexington, KY)	469	54	880	155	D	C	12	2	0	1974	Food & vending service
420. Maryland Computer (Forest Hill, MD)	468	54	1,565	276	D	D	24	7	0	1976	Hardware/software suppl. for business
421. Phillips Publishing (268) (Bethesda, MD)	467	54	6,490	1,144	D	C	60	12	11	1973	Publish newsletters
422. Whipps (Athol, MA)	467	54	1,021	180	D	C	11	3	0	1977	Water control equipment
423. Technical Systems Consultants (Chapel Hill, NC)	466	54	1,020	180	A	A	16	7	0	1976	Computer systems software
424. JWK International (314) (Annandale, VA)	464	54	9,395	1,664	D	D	200	50	0	1973	Government R&D
425. Spartan Paper & Office Supply (Lansing, MI)	459	54	3,725	666	D	C	42	13	2	1975	Distr. office products & furniture
426. Advanced Mfg. & Devel. (120) (Willits, CA)	459	54	2,259	404	D	F	37	15	0	1976	Sheet metal & machining
427. Landau Building (Allison Park, PA)	458	54	7,894	1,414	D	D	37	17	0	1976	General contracting
428. Amigo Sales (212) (Bridgeport, MI)	458	54	12,099	2,170	D	D	145	40	1	1968	Mfr. & sales of wheelchairs
429. Satter Cos. (116) (West Palm Beach, FL)	457	54	28,227	5,071	D	C	97	34	0	1972	Real estate development
430. Zimdar Enterprises (Wyoming, MI)	455	53	579	104	C	B	10	8	0	1974	Picture frames & framing supplies
431. Avanti Communications (Newport, RI)	454	53	3,829	691	D	D	53	21	0	1976	Mfr. & sell high-speed commun. equip.
432. Miller Oil (336) (Norfolk, VA)	453	53	23,878	4,318	D	D	85	23	6	1977	Petroleum distributor
433. Office Systems (Charlotte, NC)	453	53	1,701	308	C	D	29	17	0	1972	Microcomputer/word processing sales
434. Lube 'n Go (El Paso, TX)	451	53	728	132	C	A	24	12	0	1976	Automotive lubrication service
435. Dixon Group (Norfolk, VA)	451	53	1,140	207	C	C	14	8	0	1978	Marketing, advertising & PR
436. Century Data Systems (237) (Raleigh, NC)	450	53	8,800	1,600	D	D	110	43	0	1975	Electronic sales & service
437. Anaheim Custom Extruders (Anaheim, CA	450	53	1,448	263	D	D	29	7	0	1977	Mfr. plastic tubing & shapes
438. Custom Feed Services (Norfolk, NE)	449	53	1,837	334	C	D	13	5	0	1968	Mfr. vit./min. premixes for livestock
439. Omega Performance (San Francisco, CA)	449	53	3,317	604	D	A	40	35	0	1976	Develop training programs
440. California Labels (Fresno, CA)	447	53	2,358	431	D	C	65	15	0	1975	Mfr. pressure-sensitive labels
441. McDougal, Littell (Skokie, IL)	447	53	10,810	1,975	D	D	90	20	0	1969	Educational publisher
442. S. T. Research (Newington, VA)	445	53	4,195	770	D	D	86	20	0	1971	Microprocessor-based systems
443. Cherokee of California (201) (Gardena, CA)	444	53	36,140	6,646	D	D	740	332	0	1968	Mfr. women's shoes & apparel
444. Phone Directories (226) (Provo, UT)	443	53	3,166	583	A	C	16	8	0	1973	Indep. phone directory publisher
445. Spectrum Foods (San Francisco, CA)	441	52	13,152	2,433	C	D	450	125	0	1972	Restaurant devel., constr. & mgmt.

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	Sales Growth 1978–82				Profit range*		No. of employees				
Rank, company ('82 rank)	Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	'82	'78	'82	'78	Acquisitions '78-'82	Date founded	Business description
446. Skyway Freight Systems (Santa Cruz, CA)	440	52	8,100	1,500	D	E	65	17	0	1977	Freight transportation
447. Patson's Press (Santa Clara, CA)	440	52	680	126	C	F	22	4	0	1968	Commercial printer
448. Custom Decor (448) (Dover, DE)	440	52	2,716	503	D	C	28	6	0	1974	Importer/wholesaler of giftware
449. Allied Broadcast Equipment (Richmond, IN)	439	52	9,700	1,800	D	D	36	12	0	1966	Audio equipment sales
450. Collier-Jackson (Tampa, FL)	439	52	3,742	695	D	E	63	23	0	1975	Computer software products sales
451. Ostarr (La Grange, IL)	437	52	548	102	D	F	4	2	1	1976	Mfr. concrete repair products
452. Midcom (Southfield, MI)	435	52	10,047	1,879	D	A	250	100	4	1974	Information storage services
453. Brun-O-Matic (Canastota, NY)	435	52	2,734	511	C	C	48	7	0	1955	Food service & vending
454. Anadex (287) (Chatsworth, CA)	435	52	26,474	4,952	D	D	360	120	0	1957	Dot-matrix printers
455. Geo-Centers (Newton, MA)	434	52	2,218	415	D	C	35	5	0	1973	High-tech R&D
456. W. A. Brown Instruments (Orlando, FL)	433	52	8,092	1,517	D	D	68	28	0	1948	Dist. computer peripherals
457. Domino's Pizza (Ann Arbor, MI)	433	52	128,696	24,125	D	F	500	90	3	1960	Fast-food franchising
458. Connecticut Travel Serv. (286) (New Britain, CT)	433	52	16,000	3,000	D	D	72	15	0	1970	Travel agency
459. Technical Ceiling Systems (Fenton, MO)	432	52	3,063	575	D	C	32	12	1	1974	Mfr. ceiling components
460. Aloe Charm (284) (King of Prussia, PA)	432	52	7,450	1,400	D	D	75	28	0	1975	Cosmetic party plans
461. Tarrant Service Agency (117) (Louisville, KY)	432	52	2,714	510	C	C	8	5	0	1976	Distribute air conditioning parts
462. Signal Vision (Laguna Hills, CA)	432	52	5,000	940	A	A	8	4	0	1976	Mfr./dist. CATV equipment
463. Crafco (156) (Chandler, AZ)	431	52	9,563	1,802	B	B	60	12	0	1976	Mfr. pavement maintenance products
464. Summagraphics (161) (Fairfield, CT)	430	52	24,209	4,570	D	C	395	195	0	1972	Mfr. digitizers & CAD/CAM equip.
465. Kolin Plumbing (320) (West Babylon, NY)	429	52	2,996	567	C	B	43	12	0	1974	Installation of plumbing systems
466. Computer Sys. Research (98) (Avon, CT)	428	52	1,985	376	C	A	23	1	0	1974	Computer systems training
467. TOM Software (Seattle, WA)	428	52	2,964	562	C	B	45	30	0	1974	Computer software development
468. Komfort Koach (Louisville, KY)	427	52	5,714	1,083	D	D	77	22	0	1975	Vehicle modification
469. Sonic Air Courier (122) (Inglewood, CA)	427	51	7,900	1,500	A	B	100	20	0	1976	Air courier
470. Dryden (Indianapolis, IN)	425	51	1,923	367	D	F	27	10	0	1968	Mfr. medical devices
471. Command Plastic (425) (Akron, OH)	424	51	3,175	606	F	C	80	18	1	1970	Mfr. vinyl packaging
472. Systems Group (Santa Clara, CA)	423	51	1,923	368	A	A	47	13	0	1973	Microcomputer software services
473. Systec (Sanford, FL)	422	51	2,090	400	D	C	44	11	0	1977	Computer maintenance
474. Unwin, Scheben, Korynta, Huettl (Anchorage, AK)	421	51	5,320	1,021	D	D	50	25	0	1972	Architectural & engineering serv.
475. Xentek (168) (San Marcos, CA)	421	51	14,971	2,875	D	C	460	215	0	1972	Mfr. power suppliers & transformers
476. Boutique . . . Caprice (Chicago, IL)	421	51	727	140	C	A	6	3	0	1976	Women's ready-to-wear store
477. Micro-Metl (258) (Indianapolis, IN)	418	51	4,441	857	C	C	51	12	0	1963	Mfr. sheet metal accessories
478. Seavex (308) (Boston, MA)	417	51	1,256	243	A	F	12	3	0	1977	Publishing & publisher's ad rep
479. Meistergram (Cleveland, OH)	417	51	9,464	1,832	B	C	80	55	0	1933	Mfr. industrial embroidery machines
480. Seneca Balance (416) (Depew, NY)	415	51	2,100	408	A	F	35	10	2	1975	HVAC testing & balancing

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Rank, company ('82 rank)	Sales Growth 1978-82		'82 sales ($000)	'78 sales ($000)	Profit range *		No. of employees		Acquisitions '78-'82	Date founded	Business description
	Percent increase	Compound annual rate			'82	'78	'82	'78			
481. F. H. Chase (451) (Avon, MA)	415	51	6,567	1,276	D	D	40	10	0	1973	Sell & install interior systems
482. Hoyt Investment (Bloomington, MN)	413	51	11,641	2,269	B	C	90	75	0	1965	Construction
483. Juniata Office Supplies (Altoona, PA)	412	50	566	111	C	C	10	3	0	1978	Office equipment sales
484. Libra Programming (Salt Lake City, UT)	411	50	2,772	542	C	A	55	12	0	1977	Micro software & hardware sales
485. Lafayette Manufacturing (Hayward, CA)	411	50	8,247	1,613	C	F	82	27	0	1937	Mfr. precast concrete
486. Berger Metal Fabrication (Mountain View, CA)	411	50	1,612	315	B	A	26	10	0	1976	Sheet-metal products
487. IMS International (Carson City, NV)	410	50	16,262	3,188	A	C	105	25	0	1975	Mfr. microcomputer systems
488. Booth Organization (Gaithersburg, MD)	408	50	990	195	A	A	165	30	0	1977	Office cleaning
489. Film Technology (Hollywood, CA)	408	50	750	148	D	F	16	8	0	1972	Motion picture restoration
490. Lear Hunter Aviation (Miami, FL)	405	50	643	127	C	F	4	1	0	1978	Wholesale aviation parts distributor
491. Klutz Press (Palo Alto, CA)	405	50	914	181	A	A	3	3	0	1977	Publisher
492. Red Lion Controls (York, PA)	404	50	5,281	1,047	C	C	80	28	0	1973	Mfr. industrial electronic equip.
493. Specialty Surfacing (357) (Honolulu, HI)	403	50	825	164	C	B	13	5	0	1976	Contractors
494. SuperFlow (Colorado Springs, CO)	402	50	1,260	251	C	C	15	4	0	1975	Mfr. microprocessor-controlled sys.
495. Timberland (Newmarket, NH)	400	50	60,000	12,000	C	D	1000	250	0	1933	Mfr./sell boots & shoes
496. Dav-El Livery Services (158) (New York, NY)	400	50	10,000	2,000	F	D	310	40	0	1971	Chauffeured limousine services
497. BMC (St. Charles, IL)	400	50	3,000	600	C	D	10	2	0	1978	Mfr. fiberglass reinforced materials
498. Engineered Materials (Denver, CO)	399	49	1,790	359	D	F	3	2	0	1976	Sales of construction materials
499. Tank Services (Bolivar, OH)	398	49	1,191	239	C	A	20	3	0	1975	Abrasive blasting
500. Robert Douglass Assoc. (224) (Houston, TX)	397	49	3,140	632	B	D	50	18	2	1973	Hospital & health-care consulting

HOW THE INC. 500 WERE SELECTED

The 1983 INC. 500 is the second annual ranking of the 500 fastest-growing privately held smaller businesses in the United States. To be included on the list, each company had to meet the following qualifications:

1. The company is an independent, privately held corporation, proprietorship, or partnership.
2. The company shows a sales history of at least five years. Companies founded after 1978 were excluded.
3. Sales in 1978 were at least $100,000 but less than $25 million.
4. The company's 1982 sales exceeded its 1981 sales. Companies showing growth in the five-year period, but a sales decline in 1982, were excluded.

While the criteria were relatively simple, the task of identifying the 500 finalists was complex, both because of the numbers of companies involved and because the project depended on information that is generally regarded as confidential.

INC. estimates that the total universe of potential INC. 500 candidates exceeded 500,000 companies. The research relied on two primary sources: INC. readers and in-house records. In addition, business groups, trade associations, and professional service firms were alerted to the search for high-growth companies by letter, advertisements, and personal contact.

Business reply cards inserted in the May 1983 issue and advertisements in the May, June, and July 1983 issues invited readers to nominate candidates for the INC. 500. Drawing on the publication's national circulation of more than 400,000, the cards generated more than 5,000 entries from April 1 to July 31. INC.'s in-house database was screened to produce an additional 2,000 candidates, and another 1,500 names were added from directories and editorial files.

On July 1, data forms were sent to 8,500 company executives. About 2,000 responses were received by the deadline of August 31. From those responses, more than 650 smaller, privately owned companies whose sales had at least quadrupled in the past five years were identified and ranked by percentage gain in sales. Information on these companies as well as companies from last year's list was then verified through signed statements from company officers, support material from outside professionals, and telephone interviews with executives of each company.

The list of INC. 500 companies was compiled by senior editor Bradford Ketchum Jr. and research editor Elyse Friedman, researchers Maura McEnaney and Carol Torres, and interviewers Elizabeth Ansin Ehrenfeld and Michael Calvin.

million in sales, a 437% increase over 1982's revenues of $9.4 million.

Although some analysts predict a shakeout among the PC-compatible makers, Diaz remains confident. "The market will always be big enough to accommodate half a dozen good-size companies," he says. But to hedge his bets, he has raised $3 million in venture capital; plans a public offering by year's end; and has pursued large retail chains as well as OEMs, a distribution channel that competitors have largely ignored. "We narrowed our vision to a more defined marketplace, which turned out to be the right one," he says. Before, "we were just an also-ran."

Don Lehr, chairman and chief executive officer of IMS International (#487), a Carson City, Nev., manufacturer of multiuser, multiprocessor computer systems, doesn't include a high degree of IBM PC compatibility in his plans for future machines.

Lehr and his partner, Al Fiegehen, founded IMS in 1975 to make electronic controls, and eased into micro manufacturing when a computer store asked the men if they could make memory boards. Now, vertical integration (IMS owns its own metal shop), a two-year warranty (the industry standard is 90 days), and overseas sales (over 40% of its product goes to more than 14 foreign countries) has stoked company sales. Like Diaz, Lehr plans to raise funds with a small public offering. While his micros can run some IBM software, Lehr sees diversification as the key to future growth. IMS recently introduced a new terminal, and Lehr spots fresh opportunities in his original business: the manufacture of controls. "We consider ourselves an electronics manufacturer that happens to make computers," he explains.

The new product lines introduced, or contemplated, by these three manufacturers are certainly one step on the road to survival. "Any reasonably intelligent person with some resources can build a hit personal computer," says Jack Karp, program director of the personal computing service at Gartner Group Inc., a strategic-planning firm in Stamford, Conn. "Adam Osborne proved that. What's much harder is to transcend a single product and product concept, then move on to multiple product concepts. Companies that are unable to do this are going to get killed."

> "Companies that are unable to [move on to multiple product concepts] are going to get killed."

But the future that industry analysts predict for the three companies isn't as rosy as their CEOs might like. Karp, for instance, keeps a "dirty dozen" list of micro manufacturers that he thinks will be key players in 10 years. None of the INC. 500 companies is on it (although Columbia Data, he feels, has the best shot). Clearly, if the three micro manufacturers are to prosper—or make it at all—they are going to have to engage in some fancy footwork.

IBM's presence—and the subsequent coming of age of the microcomputer as a business machine—has only served to expand markets for the INC. 500 companies making micro-related devices. These include a magnetic tape-drive manufacturer (Data Electronics Inc. [#156], San Diego, Calif.), a computer board maker (Heurikon Corp. [#266], Madison, Wis.), two companies that make interfaces (Elographics Inc. [#299], Oak Ridge, Tenn., and Dorman Bogdonoff), a disk-controller manufacturer (Interphase Corp. [#201], Dallas) a modem manufacturer (Hayes Microcomputer Products Inc. [#4], Norcross, Ga.), and a printer company (Anadex Inc. [#454], Chatsworth, Calif.).

INDUSTRY BY INDUSTRY . . . BY THE NUMBERS

Rank by growth	Business type	No. of companies	Avg. growth rate 1978–82	Rank by profit	Avg. sales by employee 1982 ($000)	rank	Avg. growth in employment 1978–82	rank
1.	Travel	6	2,234%	20	$202	7	881%	4
2.	Real estate	8	2,161	2*	336	2	1124	2
3.	Telecommunications	17	1,560	4	68	19	1388	1
4.	Consumer goods	58	1,556	11	247	6	833	5
5.	Construction	40	1,499	14	260	4	502	13
6.	Computers & related prods.	44	1,474	6*	118	15	474	15*
7.	Insurance	10	1,468	19	267	3	657	9
8.	Finance	8	1,266	2*	129	13	594	11
9.	Consultants, finance	3	1,197	6*	257	5	461	17
10.	Apparel	16	1,159	12	126	14	949	3
11.	Medical	15	1,097	10	146	11*	500	14
12.	Data processing	33	1,075	9	78	18	705	8*
13.	Commercial equip. & supplies	22	986	16	147	10	397	18
14.	Petroleum industry	8	977	15	526	1	647	10
15.	Cable TV	6	972	1	146	11*	474	15*
16.	Consultants	19	868	7	102	17	740	6
17.	Transportation	27	858	17	174	8	508	12
18.	Building & maintenance	15	833	3	53	21	470	16
19.	Food	21	809	8	109	16	705	8*
20.	Publication & communication	35	799	5	162	9	344	20
21.	Industrial equip. & supplies	63	773	13	131	12	394	19
22.	Consultants, computer	5	697	18	60	20	732	7

*tie

Unlike micros, which have almost become commodities, many of the products these companies produce demand sophisticated technological know-how. "We're not making something in which there's a backlog of knowledge," says Elographics president William Gibson. But the companies, although technology-driven, have not neglected their marketing strategies.

Anadex, a manufacturer of dot-matrix printers, has at least 20 competitors. And, says chairman and CEO Jack Weaver, "there are more coming all the time." Like other INC. 500 companies, however, Anadex benefited from an early start.

The company was founded in 1957 to make industrial control instruments. In 1977, Weaver saw a chance to grow with micros and "grabbed it." In an industry dominated by electronics whiz-kids, he chose to develop a printer—a product that required his ingenuity as a mechanical engineer. "Most anyone can put together an electronics edge these days," he says. To keep its position in the marketplace, Anadex doubled its advertising budget from 1981 to 1983.

Interphase faces little competition for its specialized disk-controllers—devices that link micros with very fast, high-capacity hard disks. The company was first to market with its product and, says president Michael Cope, "only a half-dozen companies are competent technically to do what we do."

Cope founded Interphase in 1974 to advise other Texas businesses on how to apply the new micro technology to their products. (It was responsible for the design and development work for all Radio Shack models, for example.) Then Cope decided to produce his own product—one that would require little capitalization, demand technological sophistication, and plug a hole in the marketplace. "We're a niche marketer," says Cope. "We find niches that are not well served by [big companies] and exploit them. Then we dominate the niche."

To maintain its growth, Interphase has pumped funds into the development of the Maverick, a new, high-performance disk controller for the IBM PC. "You can't turn off the [research and development] spigot," Cope insists. He has the right idea. Only from R&D will these companies find the flexibility and new products they will need to survive. *—Abby Solomon*

THE INC. 500 INDEX (company and rank)

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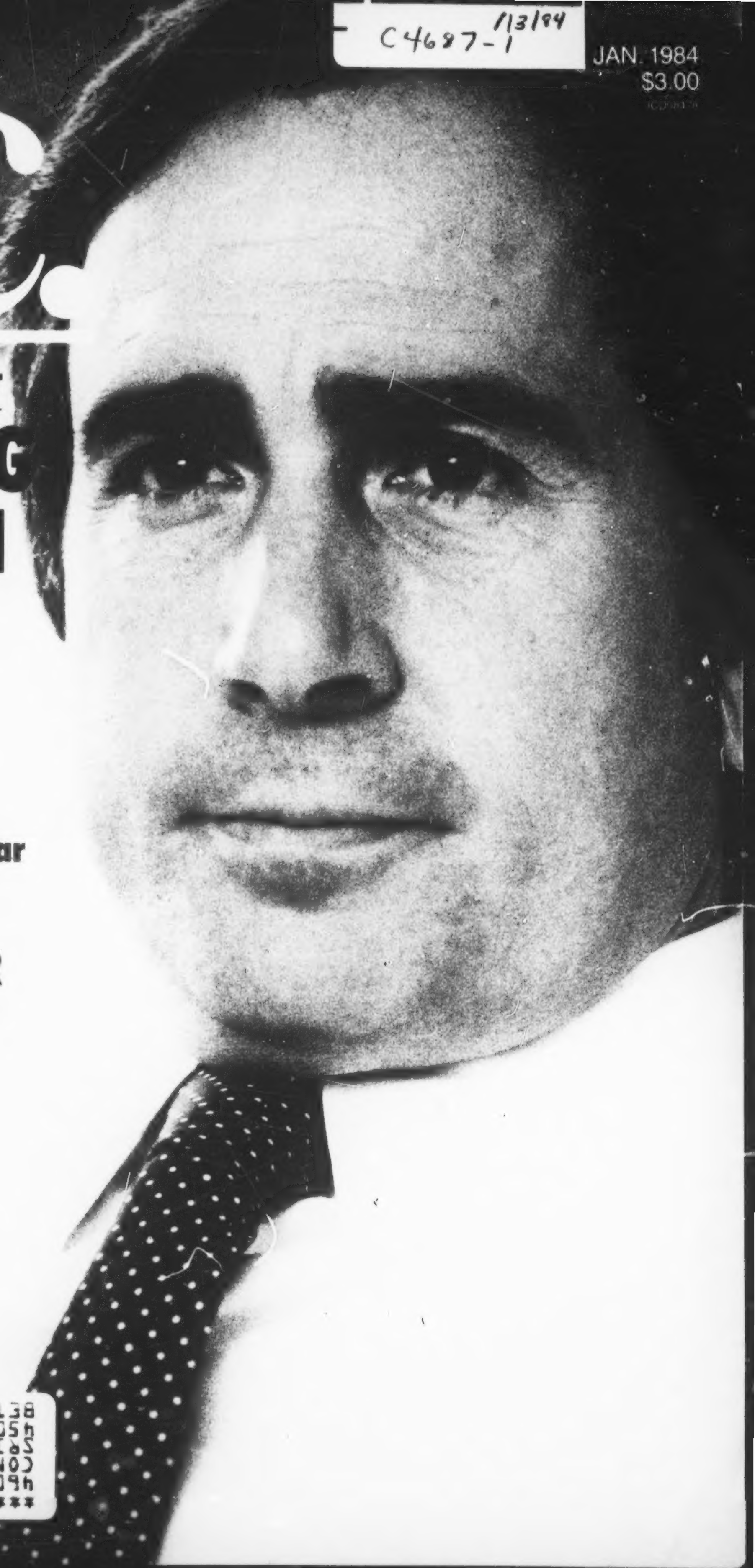

People Express' Donald Burr

THAT DARING YOUNG MAN AND HIS FLYING MACHINES

Creating a product so popular you can't satisfy demand

SOLIDARITY FOREVER

One company and its union team up for growth

THE BIG EIGHT WANTS YOU

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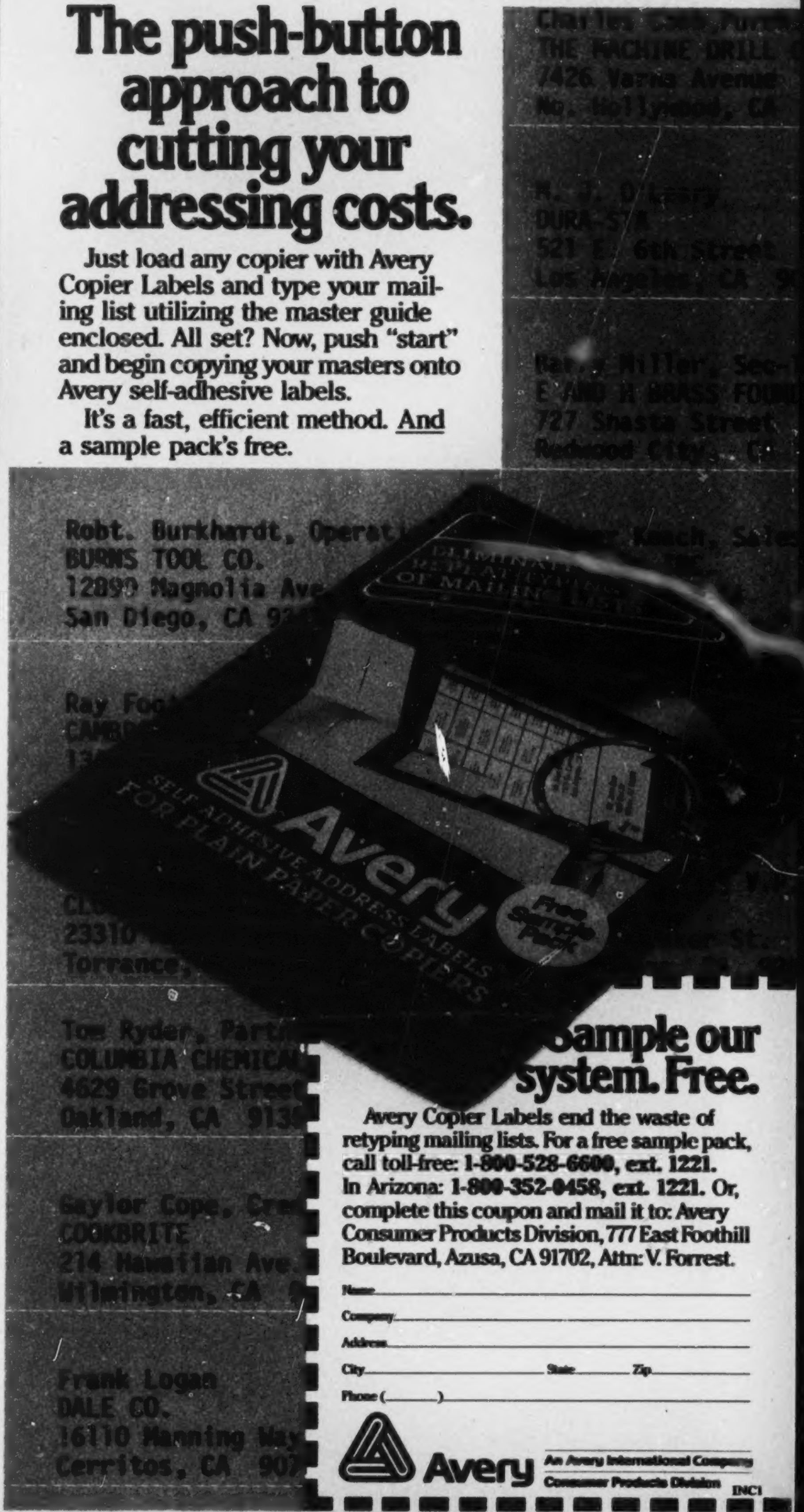
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INC. Cover Story

THAT DARING YOUNG MAN AND HIS FLYING MACHINES

The fastest-growing company in the history of aviation has a problem. It has designed a product so popular that it can't satisfy demand.

By Lucien Rhodes

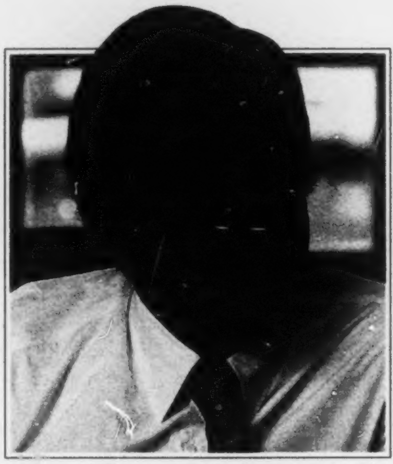
Candee Brock is being cross-utilized today.

Wearing the brown and tan uniform of People Express Airlines Inc., she is checking bags for passengers leaving the North Terminal of Newark International Airport. Between tickets she talks about a day that changed her life.

March 25, 1981, was an unusually pleasant day in Buffalo, after a harsh, lingering winter. Candee thought she had things pretty well figured out. She had just quit her job as a dental hygienist and was enrolled to study business management at State University College at Buffalo. She was at home reading the *Buffalo Courier-Express* and saw an ad announcing great opportunities as a customer-service manager for People Express. "It seemed like it was written just for me," she says.

Candee drove to the Sheraton Inn Buffalo East, where the interviews were being held, took a look at the mob of some 12,000 applicants, and drove back home. "They'll never notice me in all those people," she recalls thinking. She considered doing some studying or maybe some errands around the neighborhood, but the ad wouldn't leave her alone. She drove back to the interviews.

On April 2, Candee arrived in Newark, N.J., and checked into the Holiday Inn North, where she would live for a month while she was in training. "When I first got to the People Express office," she says, "I found an empty terminal with garbage cans lying around. There were no planes; you had to imagine them flying in. I said to myself, 'We're going to land people here?' But a month later, I was at the check-in counter. The garbage was gone, the planes were here, and there was wallpaper on the walls, even if it was still wet."


John Goodman

CEO Donald Burr (above, and center right with some of his team members): "People are the glory and frustration of People Express."

When she is not checking baggage, Candee is team manager for 54 people in the accounts-payable and accounts-receivable section of the accounting department. She works 10 to 12 hours a day, five or six days a week, and says she would work more. She makes $24,000 a year and owns 8,400 shares of People Express stock, trading over-the-counter at $18.50 a share at press time. Candee is 25.

"I've grown a lot in two years," she says. "My job has given me more confidence in every area of my life. Now I'm involved in the day-to-day operations of a very successful airline."

Indeed, "very successful" may beggar the truth. By all accounts, People Express is, quite simply, the fastest-growing airline in the history of aviation, a happy fact that flight attendants will sometimes announce at the end of a flight. Says John J. Dickerson Jr., general manager of New Jersey airports: "Fantastic is even an understatement. Their growth is a phenomenon all its own."

In one furious acceleration akin to the lift-off thrust of a Boeing 737, People Express rose, in just two and a half years, from relative obscurity to international prominence. From 250 to more than 3,000 full- and part-time employees. From three planes serving 3 cities with 24 flights a day to a fleet of 22 Boeing 737s, 10 Boeing 727s, and one 747 making 264 nonstop flights daily to 20 destinations, including London. From a loss of $9.2 million, including start-up costs, on $38.4 million in revenues to earnings of $1 million on revenues of $138.7 million in 1982. And the company recently reported revenues of $116 million and net income of $6.3 million for the first six months of 1983. People Express has carried some 10 million passengers and is currently the largest single airport operation in the New York metropolitan area.

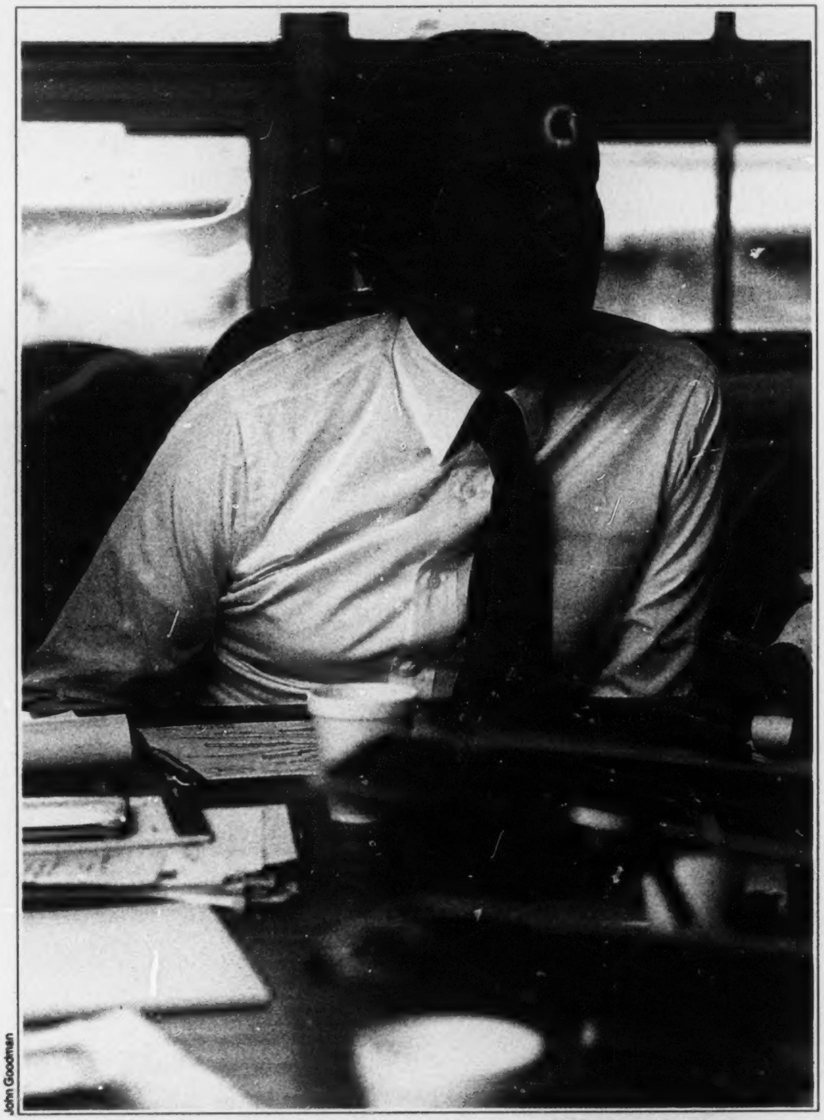
And it has done all this despite a severe economic recession, withering price wars, a national air-traffic-controllers strike, and otherwise dismal conditions in the airline industry that have included bankruptcies and widespread operating losses.

"We have a unique problem," president and founder Donald Burr recently told a group of college educators. "We've designed a product which is so popular we can't satisfy the demand for it."

That product is a seat on an aircraft that flies between Newark and some other major city on the East Coast (and London), that is frequently available, and that is, above all, cheap. For example, the well-known Eastern Air Lines Inc. Shuttle between New York and Boston offers 15 flights a day during the week for $57 during peak hours and $42 off peak. The People Express shuttle between Newark and Boston offers 20 flights a day for $38 peak and $25 off peak. People Express passengers are ticketed on board or pay in advance through a travel agent. They pay to have baggage checked and for snacks and drinks on board. There are no free magazines, either. The most telling measure of the popularity of the Spartan treatment is called the "load factor." The load factor expresses with a percentage that portion of all available seats in any given time period that were actually filled by paying customers. In July, People Express's load factor was a stunning 83.6%, compared to an average load factor of 60% for the airline industry. "We believe," Burr says, "that if you respect people and give them a good deal, they'll use the hell out of it."

But Burr also says, "Being a commercial success is not enough. It's a derivative of doing other things well. The whole purpose of creating this enterprise in the first place was to create an environment which would enable and empower employees to release their creative energies." For Burr, the interplay of marketing, scheduling, and cost control has a beauty all its own, but the personal fulfillment of individual employees through the company's "people structure" offers something more. "People," he says, "are the glory and frustration of People Express."

Sometime during his childhood in South Windsor, Conn., Don Burr, now 42, discovered three truths about himself that he would pursue for the rest of his life. Whenever he did something he liked, Burr noticed, he invariably did well at it. And, resting on the same ledge of raw self-awareness, he found two other items of interest. For one thing, he liked planes. Every Sunday he badgered his parents into driving him to Hartford/Brainard Airport. There he would lose himself in the wide-eyed splendor of man-made flight. For another, he liked business.



John Goodman

"This is capitalism," says Burr. "People are getting rich here. There are millionaires here and 25-year-olds worth $75,000, $100,000, $200,000. Tons of 'em."

"I used to go into the candy store," he says, "and wonder how that guy ran that store. I thought I could never do that—run a store, order all those things. Kids would talk about Mickey Mantle hitting home runs. I thought that was great how that guy ran that store. I've always been like that. I've always wanted to know how you put those things together."

After graduating from Harvard Business School in 1965, Burr became a securities analyst for National Aviation Corp., a closed-end investment company based in New York City that specializes in airline and aerospace securities and venture capital. Six years later, he was elected president of the company. At 31, Burr was already an expert in the economics and financial strategies of starting and running a commercial airline.

One of the airlines in the National Aviation portfolio was Houston-based Texas International Airlines Inc., a regional-service airline that, according to Burr, had a long history of mismanagement and had a huge working-capital deficit. Texas International asked Burr if he would help bail it out, and he accepted. Burr was getting closer to his own candy store.

Burr's careful study of the airline industry as a securities analyst didn't fail him. He recalled that during the early 1960s, Pacific Southwest Airlines in California had used low-price fares as a marketing strategy to increase traffic. In 1976, Burr, faced with a similar problem, dusted off the idea, dressed it up a bit, and introduced "Mr. Peanut" as the embodiment of Texas International's new, low-cost "peanuts fares" between selected cities. "There were lots of arguments inside Texas International about peanuts fares," remembers Burr, "and somebody told me later that they burned Mr. Peanut in effigy."

But the plan worked. As traffic rose so did profits, and so did Burr. In 1976, he was made chief operating officer and in June 1979, president. Six months later, he resigned. Mr. Peanut would soon find a new identity in Newark.

When Burr left Texas International, he had no specific direction in mind. Congress had passed the Airline Deregulation Act of 1978, which freed existing airlines to compete aggressively in both route selection and pricing, and encouraged new entrants. Burr sensed that the end of 40 years of control by the Civil Aeronautics Board (CAB) created an historic moment exactly when he was looking for a new challenge. At the same time, he was disturbed by a kind of free-floating, and growing, dissatisfaction with what he viewed as typical corporate attitudes toward employees. "Most organizations frustrate people who really want to work," he says. "They

John Goodman

Cross-utilization in action: Candee Brock, a team manager in accounting, aids arriving passengers.

control them, and watch them, and check up on them. They subsume the individual. They consider them guilty until proven innocent."

At first, he waited for greatness to be thrust upon him. After all, he was only 38 and he had already been president of two companies. He was well known in the industry and well connected on Wall Street. "I was thinking that I'll get some calls for sure. There must be a lot of people out there who want somebody like me to run their airlines. But did I get any substantive calls? My mother called and that's pretty much it. That's when I realized that the world really didn't care whether I got up in the morning; it didn't give a damn. But is that bad, is that immoral? No, that's life. That's the way it is. No one would have me, so I had to start my own.'"

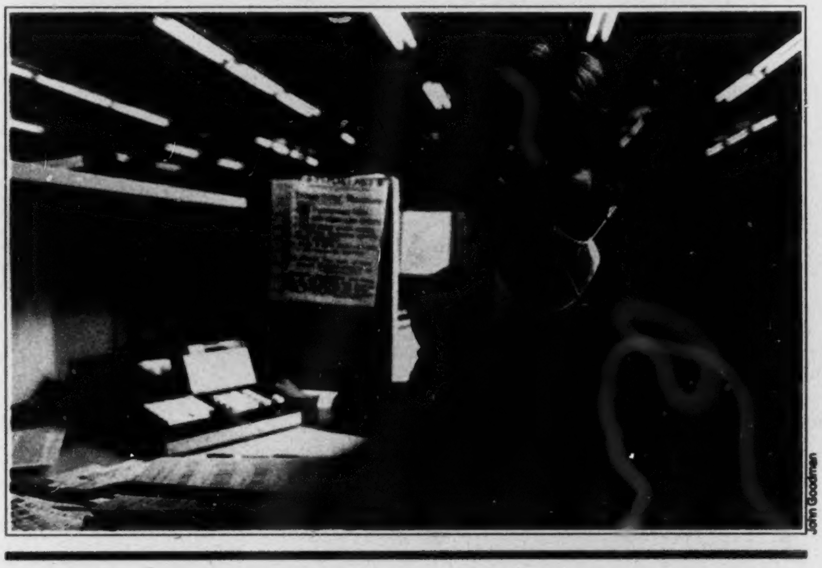
When friends or business associates talk about Donald Burr today, they invariably say, "He could've been a preacher." They don't say "minister," or "reverend," or "clergy." They say "preacher" because it conveys exactly the right sense of sweating-in-a-hot-tent, evangelical fervor that makes the pulse race. Burr works hard when he talks. He paces; he sits; he stands; he throws out his arms; he condemns and praises, implores and jokes. He moves effortlessly from the blunt, almost slang, of a working-class neighborhood to the polished diction of the corporate boardroom. And all the while, there never seems to be any doubt that he can do exactly what he says he will.

Little wonder, then, that Gerald L. Gitner, his senior vice-president of planning and marketing at Texas International, and Melrose Dawsey, Burr's executive assistant, both risked their careers by resigning a day after Burr. They didn't know what they could earn, if anything, or what they would do, but it didn't matter. Burr had set out on a great adventure and they wanted to go along.

This band of fellow travelers that Burr remembers as "three lonely people standing on a street corner" soon moved inside when they took space in a "rent-an-office place of the type used by fly-by-nighters" in Houston. During the day, they read trade journals and made calls to friends in the airline industry, trying to unearth an appropriate opportunity for themselves. Between calls, they passed the time by daydreaming out loud about starting a new airline: If you could, how would you organize it? Where would you get the money? What kinds of planes would you use? What airports, and, wouldn't it be nice? Then one day, imperceptibly, daydreaming turned to planning and commitment. It would be a candy store on a grand scale. Burr sold off his car, his house, two condominiums in Park City, Utah, and one in Vermont, his Texas International stock, and he drained his savings so he could put $350,000 into the new venture. Gitner invested $175,000, and Dawsey, $20,000. On April 7, 1980, they incorporated People Express, a new commercial airline whose very name, in Burr's opinion, put first things first.

The next year was a breathless, nonstop, near-miracle of activity: raising money, finding planes, finding an airport, preparing documents, recruiting and training personnel, selecting routes, and working out schedules. Three people could never have done it, but, as Burr spread the word, more of his Texas International colleagues began signing up. There was Harold "Hap" Pareti, 35, his former legal counsel, now managing officer for flight operations and legal and government affairs; Lori Dubose, 31, managing officer who is in charge of recruitment and training and in-flight service; and Bob McAdoo, 38, his former controller and now chief financial officer. By December of 1980, some 15 former Texas International executives and managers had joined the People Express start-up team, and Burr, at 39, was the oldest member.

In July, People Express became the first airline to apply to the CAB for permission to form a new airline since the passage of the 1978 Airline Deregulation Act. Although the 200-page required document filed with the CAB stated that the company intended to raise roughly $5 million and lease a few planes to fly out of Newark until it had made enough money to buy


John Goodman

People Express is traveling in uncharted territory, says one consultant. "Other firms have done parts of what they're doing, but the complete package is unique."

planes, Burr had already begun work on a larger concept.

People Express chose to fly its planes in a configuration known as the "hub and spoke." All flights would make round trips between a single point (the "spokes") and a single terminal (the "hub"). "Among other advantages," Burr says, "a good hub-and-spoke operation is like a fortress because you can control the traffic at that terminal and shut out competition." But with only three leased planes as outlined to the CAB, People Express could hardly boast of being impregnable. Burr wanted to establish a large and immediate presence in the marketplace, and it would cost a lot more than $5 million. Fortunately, in August 1980, Bill Hambrecht of Hambrecht & Quist, the San Francisco–based investment firm, took Burr to lunch at the University Club in New York City.

Hambrecht was eager to meet Don Burr. He had heard about Burr's plans through a mutual friend and had already done some research on his own. Burr, on his side, intended to ask Hambrecht to take People Express public immediately even though no airline had ever gone public to raise start-up money. They lunched amiably for about 45 minutes, swapping stories about finance and Wall Street. Then Hambrecht announced that he had to leave for an appointment, and Burr choked on his food. "I was horrified," Burr says. "We'd been doing all this talking, and I hadn't even described my proposal. So I blurted it out. He asked me a few questions and agreed. I nearly fell off my chair." Says Hambrecht, "The whole thing made a lot of sense to me—fast turnaround, low fares. I've always felt that in a climate of deregulation, low-cost newcomers have a great opportunity because the old companies usually hate to give away their price monopoly; they're slow to adjust to the new competition." Burr was ecstatic. "When I walked out of there," he says, "I could've touched the moon."

Later that month, Burr showed up at Newark International Airport for the first time. Although Burr had designated Newark as the People Express airport, he had only read that space was available; the actual details were far from certain. "I didn't know Newark from my elbow," he says. "Actually, I kinda liked San Francisco."

John J. Dickerson Jr., the general manager of New Jersey airports, had already heard the story many times before Burr ever knocked on his door. Deregulation had spawned a small army of would-be airline operators. Some had only great ambitions and never showed up, but some had great ambitions and planes and never showed up. "We were almost going to put up a scorecard," Dickerson says. One operator had even gotten so far as to move into the office Burr now occupies. He went bust so fast that he left his furniture behind.

HOW PEOPLE DOES IT

"Give people a good deal," People Express founder Donald Burr says, "and they'll use the hell out of it." Expressed as "revenues per passenger mile," the company's ticket prices are far below those of its four major competitors. As a result, People Express fills more seats on any given plane as illustrated by the "load factor" percentage. The secret lies in controlling costs. People Express's "operating expenses per available seat mile," the basic measure of costs, are the lowest in the airline industry, so it can maintain its deep discount pricing.

Research assistance was provided by Maura McEnaney.

Operating expenses per available seat mile

	1982	1st 6 mo. of 1983
Delta	7.97¢	8.11¢
Eastern	8.21	8.42
Piedmont	9.26	8.91
US Air	11.07	10.64
People Express	5.00	5.60

Revenue per passenger mile, or "yield"

	1982	1st 6 mo. of 1983
Delta	13.67¢	12.03¢
Eastern	13.01	12.39
Piedmont	15.87	15.29
US Air	19.51	17.69
People Express	8.90	8.00

Load factor

	1982	1st 6 mo. of 1983
Delta	52.7%	58.3%
Eastern	56.7	60.9
Piedmont	55.6	53.5
US Air	57.2	60.5
People Express	60.9	77.5

Dickerson explained that the first airport terminal constructed by the Port Authority of New York and New Jersey, the North Terminal, had been largely vacant since 1973, when the airlines quartered there moved to two newly built terminals. When he saw it, Burr's normal effervescence temporarily went flat. "It was a ghost town," he says. "What didn't fall on your head bit you in the ankle." But it was right in the heart of the brisk airline traffic of the New York/Newark metropolitan area. Burr said he would take it.

No sooner had Burr left Dickerson's office than he was hit by a crushing anxiety attack, and he rushed to a phone booth to call Bill Hambrecht. "I know it was foolish," Burr says, "but everything hit me all at once. There I was at Newark airport renting space. I mean, I was really starting an airline. I guess I panicked about the money." "We shook hands," Hambrecht told him. "We'll do our best."

On October 24, 1980, the CAB granted People Express its certificate to operate as an interstate airline. A few weeks later, the company received approximately $24 million from the successful Hambrecht & Quist financing of 3 million shares at $8.50 a share. The timing couldn't have been better. Burr had just read in a trade journal that Lufthansa, the German airline, wanted to sell a fleet of 22 used Boeing 737s, and he immediately sent Hap Pareti to Frankfurt to negotiate terms. Pareti got 17 of the planes for around $70 million, or $4.1 million per plane, at a time when a new, deluxe Boeing 737 cost as much as $13 million. Lufthansa also agreed to repaint and remodel the planes according to People Express specifications. According to the terms of the agreement, People Express would lose a mandatory $6-million deposit if, for any reason, it failed to take delivery of any one of the planes. "When we got the Hambrecht financing and the 17 planes," Burr says, "I knew the sky was the limit."

Members of the start-up team spent their last night in Houston on New Year's Eve, which they celebrated by holding a long meeting on compensation policies. Then the great exodus to Newark began in earnest. By January 7, 1981, the crew members had checked into the Howard Johnson Motor Lodge near the airport, where most of them would live for the next eight months. The next day, everyone drove over to the new corporate headquarters. It was a cold and dreary day, and life at the office wasn't very plush.

Not much had changed since Burr first walked the grounds with Dickerson. Don Hoydu, a managing officer who served as an advance-man for the group, had managed to furnish a small, second-story corner of the terminal with telephones and a few desks and chairs. The group's christening act was the immediate purchase of several portable heaters to supply that which the building lacked. Then they turned their attention to the rest of the terminal. George Rayl, 35, the third pilot hired by the company, remembers the scene well: "Somebody moved out of there seven years earlier, and they were in a big hurry. There were boxes and junk all over and people running around everywhere. It took two days just to scrape the dirt off the windows.

On April 30, 1981, three Boeing 737s

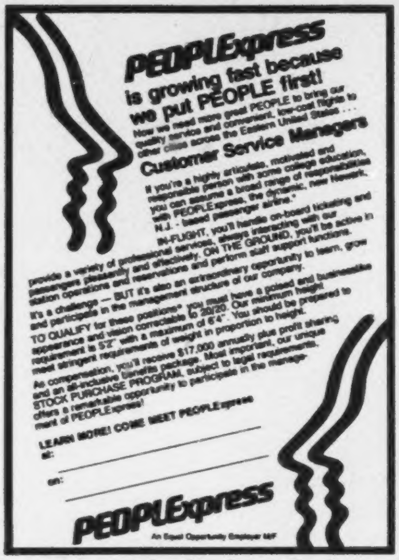
To Burr, air travel is "a commodity business, like chicken parts or steel. . . . Our strategy is to knock the price down so low that it fills the plane"—so low, in fact, that flying People Express will often be cheaper than driving or taking a bus.

bearing People Express's double-profile trademark accepted passengers bound for Columbus, Ohio; Buffalo; and, Norfolk, Va. George Rayl, who had just moved his wife and three children from California to Newark in a 24-foot U-Haul, was at the controls of the Columbus flight with 68 people on board. "There I was, a captain," he says, "something I'd always dreamed about. I couldn't have done it that fast anywhere else." Don Burr watched him take off, standing there transfixed in his white shirt, tie, and light gray business suit, working his face in wonder like a kid suddenly cut loose in a candy store.

For the price of their tickets, major commercial airlines generally offer inter-airline reservations support, reservation agents at the terminal, two classes of service, free baggage check-in and transfer, free soft drinks and meals, and free magazines. People Express looks at air travel from a radically different perspective in which all of the above are irrelevant. "It's a commodity business," says Burr, "like chicken parts or steel." Burr reasons that, given safety, a convenient flight schedule, and clean aircraft, the one thing passengers care most about is price.

"Our strategy," Burr says, "is to knock the price down so low that it fills the plane." So low, in fact, that flying People Express will often be cheaper than driving or taking a bus. Not only will habitual airline travelers panic for a seat, but folks who ordinarily would have used another form of transportation won't be able to control themselves either. "Fly smart," People Express ads urge travelers. If there is any doubt that he is on the right track, Burr simply points to the incontrovertible evidence of the 83.6% load factor.

Of course, popularity doesn't necessarily mean profitability. Many a plane has taken off packed to the baggage compartments only to land in red ink. The load factor is just one of three variables that must be handled with surgical dexterity if the airline is to make a profit. The other variables are revenue per passenger mile and costs per available seat mile, both of which resemble the revenue and cost-of-goods-sold components in a manufacturing company. The lower the costs, the less an airline has to charge the customer, and the lower its break-even load factor. In 1982, People Express's cost per available seat mile of 5¢ was the lowest in the industry. Thus, the company could maintain its deep discount pricing, charging travelers as little as 8¢ per passenger mile and still make money. At those levels, only 60% of all available seats had to be filled to break even.



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It is noteworthy that during the first six months of 1983, the actual load factor had risen faster than the break-even load factor because roughly 95% of every sales dollar at load factors above break even goes to the bottom line. "Guys like Eastern and Delta," McAdoo says, "if they're in the same market elbow-to-elbow against us trying to match our standard fare of 8¢ a mile, have to be absolutely full to break even. They've got to sell every seat or they'll lose their shirts, because it costs them 8¢ a mile to produce a seat. And somebody like US Air, if they're matching that 8¢ fare of ours can sell every seat and still not make it, because they can't cover their costs."

When Burr talks about the company's extraordinary success in controlling costs, he attributes it first to a state of mind, an attitude shared by everyone in the company that rejects waste, and secondarily to specific operating tactics. After years of experience, he explains, it is relatively easy to predict that by tearing out the first-class and galley sections on a 737, People Express could increase the number of coach-class seats from 90 to 118. Or that by innovative scheduling, it could keep the planes in the air longer—10.4 hours per plane per day versus an industry average of 7.12 hours per day. Or that by eliminating unnecessary free services it would save money. "But without the wholehearted, personal commitment of everyone involved," he says, "you could do all of those things all day and still fall on your face. That's why we thought longer and harder about building our people structure here than we did anything else."

As hokey as the term may sound, the so-called people structure has the drawing power of last call at a Saturday night beer blast. When People Express interviewers come to town looking for customer-service managers, hundreds, even thousands, of people show up. Only one applicant out of every hundred is hired. "The hiring process is extremely important," Lori Dubose says, "and it gets a lot of attention."

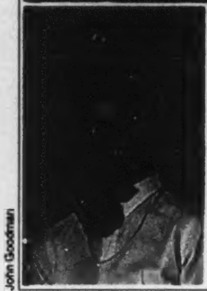
People Express hires for three categories: flight managers, another way of saying pilots; maintenance managers, who concern themselves with the physical well-being of aircraft; and customer-service managers, who do just about everything else, including such in-flight functions as baggage check-in and reservations and such staff functions as accounting. It should be noted, however, that with the company's program of cross-utilization, no employee does the same job all of the time. Every applicant in any category must first survive the jaws of an extensive screening before he or she is even offered the chance to attend training classes, which is not to be confused with a job offer, which it isn't.

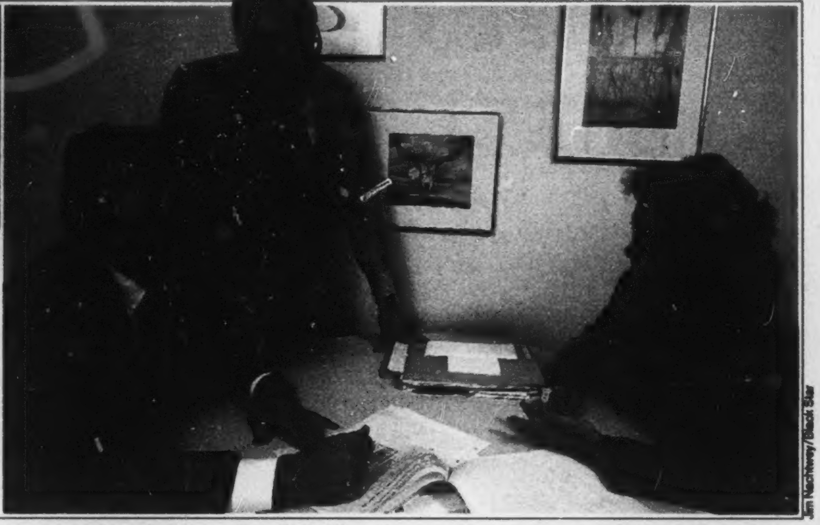
Recruiters spend about five hours evaluating each individual's qualifications. They are looking for the right People Express "type," and they know exactly what they want. Seen in groups of five or six at the Holiday Inn North or the Howard Johnson Motor Lodge, customer-service managers-in-training shine with a clean-cut, collegiate exuberance and a pleasant, if predictable, homogeneity. According to Dubose, this collage of personal attributes creates a memorable atmosphere of enthusiasm, confidence, and competence that keeps passengers flying People Express.

Hoards of people fall all over themselves for a chance to get grilled to a turn and live in a Holiday Inn during five weeks of training. If they win, they win big. By the end of their first year, customer-service managers draw a base pay of $19,500, but since the company offers not one, but two, profit-sharing plans, they can receive an additional 15% of base pay. And while they are busy filling out deposit slips, they are protected by 100% medical and dental coverage. "We just didn't want them to have to worry about it," Burr says.

Then, of course, there is the stock. Every employee is required to own stock in People Express. Customer-service managers must purchase, as a condition of their employment, 100 shares at prices far below the market. If they aren't able to afford it, the company gives them an interest-free loan. Since additional buying opportunities are made available throughout the year, employees generally end up with a significant investment. According to Dawsey, each employee owns an average of

The people structure at People Express has the drawing power of last call at a Saturday night beer blast. When the interviewers come to town looking for customer-service managers, hundreds, even thousands, of people show up.





Burr (top) was overjoyed after getting CAB permission to form a new airline. Melrose Dawsey (left), Hap Pareti, Bob McAdoo, and Lori Dubose (photo right, left to right) left Texas International to join him at People Express.

John Goodman

Jim Nachtwey/Black Star

2,500 shares worth about $46,000 at today's prices. "We're not sitting around here counting roses," asserts Burr. "This is capitalism. People are getting rich here. There are millionaires walking around here and tons of 24- and 25-year-olds worth $75,000, $100,000, $200,000. Tons of 'em. The only way I know to wealth in the long term is to own a piece of something and build it."

The early dreams of growth and wealth were sweet and full, and exceedingly fragile. Only three months after the first flights took off, it suddenly appeared that Burr's "piece of something" would never be anything more than a piece of wreckage. People Express faced ruin. On August 3, 1981, members of the Professional Air Traffic Controllers Organization (PATCO) went out on strike. The Federal Aviation Administration sharply reduced flights at 22 airports throughout the country, including Newark. People Express, which had seven planes and 35 departures a day from Newark, was cut back a full 35%. Burr estimates that from August to October, the company lost $6 million from canceled trips and low load factors. In addition, the company was rapidly reaching the point at which it could no longer live up to the conditions of its agreement with Lufthansa. If it didn't have the cash to continue buying planes, the company would lose the $6-million deposit with Lufthansa. "We were bleeding at a terrific rate," says Burr. "It was gun-to-head time. We were going out of business."

Burr and his colleagues decided on a desperate strategy. They would fly planes out of Newark to Buffalo, Columbus, and Baltimore, all uncongested and unrestricted airports. Then they hoped to fly back and forth to Sarasota and West Palm Beach, Fla., bypassing Newark. But the company's research had failed to indicate whether there was much of a market for such flights. When the planes took off on October 25, no one even knew if there would be enough passengers to pay for the gas. What is more, this shot-in-the-dark meant the company had to abandon its original hub-and-spoke operation, which in turn meant that new support services, such as maintenance and commissary supply, had to be established. "We had to bet the company a second time," Burr says. "Who'd ever heard of a 'bypass' strategy? Nobody had ever done that before. We had to create a whole new airline and we had to do it overnight."

[illegible]oo says the company chose south [illegible]a on the chance that it was the one [illegible]stination that, with its leisure-time attraction, might prove especially sensitive to price. "At $59," he says, "we thought it was cheap enough that people might take trips out of the clear blue saying, 'Why shouldn't I go to Florida?' or 'Why shouldn't I go twice instead of once, like I usually do?' "

Once again, People Express bet right. People did ask those questions and they did fly. The sunshine and warm waters of south Florida were too much to pass up in the winter of 1981–82. The planes started out 60% full but quickly built up to a load factor of 85% on many of the routes. And out of it, the company squeezed enough money to stay alive. As flight restrictions were lifted, People Express gradually returned to its original blueprint.

To Burr, building an enterprise is building the people within it. In his view, the people *are* the enterprise. Most companies, he argues, organize themselves around structures and policies that force employees to serve the company. The traditional, corporate pyramid of authority, for example, with its ascending layers of supervisory control, smothers individual initiative. Many companies contain the unspoken prejudice that employees are unreliable or, as Burr puts it, "guilty until proven innocent." Nor does this attitude go unnoticed by the employee. In time, it spawns indifference, disaffection, even belligerence. Better, Burr reasoned as far back as the dream-time days in Houston, that a company be organized to serve each employee individually by giving ownership, direct participation in its affairs, the freedom to fashion a personal contribution, and an opportunity for personal growth. People Express is an experiment to that end, an attempt to create an environment in which the usual distinctions between the company and the employee are no longer relevant, because the two have become one.

In addition to ownership, the most conspicuous features of the People Express "environment" include a relatively "flat" management configuration, the use of teams, self-management, and cross-utilization. According to Richard Hackman, a professor of organizational behavior and psychology at Yale University and a consultant to People Express, the company is traveling in uncharted territory: "Other firms have done parts of what they're doing, but the complete package is unique. They're trying to invent a new way of organizing and managing the human resources of the firm."

Work at People Express is first separated

In Burr's view, the people are the enterprise. People Express is an attempt to create an environment in which the usual distinctions between the company and the employee are no longer relevant, because the two have become one.

Jim Nachtwey/Black Star

On May 26, 1983, the first People Express flight from Newark to London took off. Waiting for the London flight has since become a spectacle in its own right, a mark of the veteran traveler.

into four "umbrella" categories: people, finance and administration, marketing, and operations, and then into 13 specific functions, as opposed to the "staff" functions, such as accounting, administration, and scheduling necessary to run the company. Although everyone at People Express is a "manager," there are distinct gradations in authority and leadership. Six managing officers provide general direction and leadership in each functional area. Team managers, a more recent addition to the People Express lineup, serve as liaisons between the teams working in any given area and the managing officers and general managers. Customer-service managers, flight managers, and maintenance managers are expected to manage themselves by setting their own goals in keeping with the company's professed objective. The buck stops at Burr.

People Express has not tried to eliminate supervisory intervention but rather to minimize it. Further, Burr says, they have redefined it. Effective managers, he says, offer direction and make sure that the right information and tools are available to get a job done. They do not dictate methods nor do they police efforts. Actual performance is a matter of individual creativity. Burr points out, however, that People Express is not built on anarchy. The direction of the company is not up for grabs. "If you don't agree with that direction," he says, "you shouldn't be here."

Although it had existed in the collective mind of the start-up team, People Express's direction wasn't written down until December 1981. Eight months after the first flights, Burr convened a meeting of the team in the former VIP Lounge just off the main concourse in the North Terminal. He was concerned that the company's objectives might be lost among the daily distractions of a rapidly growing business. The meeting was recalled by everyone involved as a day of intense, argumentative debate. Burr asked each member in turn for his or her idea of what People Express was trying to accomplish. He wrote the answers on large sheets of paper and taped them to the walls. "They worked hard," he says. "I mean they put their blood on those walls." The team emerged with a list of six "precepts" that dedicated the company to "service, growth, and development of people"; becoming the "best provider of air transportation"; the "highest quality of management"; becoming a "role model"; "simplicity"; and the "maximization of profits."

To managers at People Express, each precept appears to reveal more amplified verities. For example, Burr will point to the first two precepts and explain that they can guide managers through the puckerbrush of daily affairs: "If it's good for a customer or good for a peer, the choice you want to make in any of the myriad decisions you're faced with each day is probably a good idea." Collectively, the precepts are meant to reveal the very soul of People Express.

The best method he has yet found to translate the precepts into action is by organizing all of the managers into teams of two or three members and by cross-utilization. Everyone in the company, including the managing officers, are members of a team. This design is thought to foster self-management and a highly productive esprit de corps while at the same time eliminating additional layers of supervisory control. Teams also participate in the decision- and policymaking of the company by electing members to advisory and coordinating councils, which meet with Burr, the managing officers, and the general managers.

Cross-utilization is also considered a vital method of honing the company's competitive edge and an indispensable source of heightened productivity. Every month, a variable portion of each manager's time is devoted to some line function generally outside of his or her primary area of staff responsibility. Thus, Candee Brock, a team manager in accounting, gets to check in baggage, and Bob McAdoo, the managing officer for finance, is frequently seen serving drinks aboard a flight. Hackman, the company's consultant on organizational behavior, sees cross-utilization as a "trade-off." He says it requires more time and money in training, and that even then there are problems in maintaining operational continuity because people are moving into areas in which they are not yet fully expert. "On the other hand," he says, "you get people who really understand the business because they're not penned into a particular function."

If People Express's operating results don't prove the success of the people structure, there are two additional facts that may help. First of all, People Express has no unions. The Air Line Pilots Association International tried twice and failed. There was no interest. "Unions have a place in American business," Hap Pareti says, "but that place exists only where their role is important to protect the employees against actions of an employer who doesn't have the employees' interest in mind. To the extent you structure an organization that literally spends the majority, if not the total, amount of its time dedicated to working with its people, you don't need a union." Jack Blake, 33, a former Navy pilot who joined People Express two years ago, says that although he could probably double his $36,000 base salary at another airline, he intends to stay put. "I'm happy where I am," he says. "I've got stock and security. Last year I made captain. With the seniority systems at other airlines, I might never have gotten the chance." Finally, there is the plain fact that during the first quarter of 1983, passenger miles per employee was twice that

The London connection had long been regarded as the jewel of international routes. The load factors on existing flights were already attractive, but People Express sweetened the pot a little more by offering a $149 one-way ticket.

of the industry average for full year 1982.

But Burr still isn't satisfied. He says the company's people structure is only "60% successful," and points to problems in getting managers involved in the company's decision- and policymaking processes. "It's horribly difficult to give everyone a sense of commitment and participation," he says. "It's an inch-by-inch, every day, grinding process. There's no magic, no wands." The organization report prepared in 1982 had already identified several areas that needed improvement, including "meaningful staff work with built-in feedback, clarity about authority and constraints, built-in accountability, individual recognition, and available leadership." The report traced many of the problems to the "small number of designated leaders at People Express." It said: "This leadership element can no longer adequately address the requirements . . . for an entity of nearly 1,000 managers." The subsequent introduction of the team-manager concept to expand the company's leadership is fairly typical of the continuous evolution at work within the people structure. Jim Miller, team manager for management development, says that there are now 85 team managers and that the concept has "worked out very well."

As real as these problems may be, they are difficult to spot from any vantage point outside the company. Once the PATCO crisis had passed, People Express settled into its now familiar pattern of meteoric growth—buying more planes, hauling ever more passengers, and generally living up to its reputation as a bona fide business phenomenon.

Gerry Gitner, one of the founders and, at the time, president of the company, resigned early in 1982 to become executive vice-president for finance at Pan American World Airways Inc. According to Burr, Gitner "just never got comfortable with the basic direction of the company." "He did not believe," Burr says, "in the strength, the direction of the precepts. He was much more oriented toward routes and planes and tell people what to do, don't get in there and discuss it with them. The competitive business strategy that I doped out, which relies on enabling the individual to do well, he just couldn't get comfortable with. He didn't believe it. He said it was a pipe dream. I was disappointed when he left. I felt like I had lost a guy that I had tried hard to convince and I didn't make it with him."

Gitner had decided that the job at Pan Am was even more challenging than the presidency of People Express. In a prepared statement, he described his reasons for leaving People Express as follows: "The opportunity was presented to me to participate in a major fashion in the attempted turnaround of a world-class company. The ability to confront new and exciting challenges in this kind of situation was too tempting to resist. I felt that the goal-setting and business plans that I had developed at People Express were on sufficiently firm ground that I could begin my work at Pan Am."

But not even the departure of its president could slow the company's momentum. The fledgling airline was rapidly becoming an institution, so much so that the distinguished investment banking firm of Morgan Stanley & Co. joined Hambrecht & Quist in a second public offering of People Express stock in August 1982. It looked as though the days of corporate derring-do were gone for good. Then Hap Pareti went to London.

The London connection had long been regarded as the jewel of international routes. Although that city was a popular destination in its own right, it also served as a major departure point for more extensive European tours. The load factors on existing flights were already attractive, but People Express thought it might sweeten the pot a little more by offering a one-way ticket priced at $149, well below prevailing prices.

On April 6, 1983, shortly after the CAB approved the company's application, Pareti arrived in London to petition the British Civil Aviation Authority and the Department of Trade. He spent the next two days giving presentations. By the middle of May, Pareti still hadn't gotten any indication of British intent. He was concerned that his application had somehow become entangled in the arguments between the United States and Great Britain over the resolution of the recent Laker Airways bankruptcy. Pareti returned to London to dynamite the log jam.

On May 20, Pareti called a press conference at The American Club in London to announce that even though People Express had not yet received official approval, on May 23 it would begin taking reservations for the first scheduled departures from Newark on May 26. "When I walked into that room," Pareti says, "there must have been 100 people from the press there and 15 microphones sticking out from the speaker's platform and I was thinking to myself, Oh God, Hap, what have you done now?" The next day, the London papers announced the story on their front pages, with *The Times* proclaiming, "Flying Start for People Express." The news was released simultaneously in the United States, and within 24 hours every flight in both directions was booked solid for the next two months.

The first flight was scheduled to take off from Newark at 7:15 p.m. on May 26. At 6 o'clock that morning, Pareti, who had been up most of the night with his infant son, Jonathan, finally got the call from the British authorities giving him the approval he needed.

Waiting for the London flight has since become a spectacle in its own right, a rite of passage, a mark of the veteran traveler. The daily drama enacted before the check-in counters on the main concourse of the North Terminal is perhaps the single most convincing demonstration of the magic of People Express's strategy. A thick crowd of well over 200 people churns around in a sea of knapsacks and baggage. Some sleep on bedrolls in the middle of the aisles. A family with three young children is playing cards on a blanket. Another group is sitting cross-legged on the floor eating pizza. When the 6:30 p.m. standby call is announced, all the standbys rise as one and turn reverentially toward the check-in counters as if the Second Coming has just been revealed. The looks of anguished expectancy, the whoops of joy, and the expletives of bad luck alone are worth a trip to Newark.

Some industry analysts worry that People Express may lose control of its growth. That the insatiable need for large numbers of qualified employees and an increasingly complex operation will eventually cause People Express to spring a leak somewhere. But Don Burr isn't worried. A similar concern was recently expressed by 1 of some 35 newly hired flight managers attending an indoctrination meeting, and Burr said, "Look at IBM, they've got 370,000 people. They're very successful, aren't they? Beautifully managed, aren't they? Still an incredible entity, right? I don't see any natural boundaries to our growth." Nor is Bob McAdoo concerned. "It's going to continue to be tough," he says, "but the toughest part is behind us." McAdoo says the company is planning on a long-term growth rate that averages out to adding one and a half to two planes per month and predicts that revenues will "hit a billion dollars in a couple years."

Candee Brock won't be surprised. After all, she has always known that she was part of a "very successful airline." But today, sitting here in accounting, she still marvels at the wonder of it all. "It was strange," she says. "I wasn't really looking for a job. I was going to college. But there was something about that ad that seemed to say, 'Candee, this might be for you.' " □

Some industry analysts fear People Express may lose control of its growth, but Burr isn't worried. "Look at IBM. They're very successful, aren't they? Beautifully managed, aren't they? I don't see any natural boundaries to our growth."

INC. Special Report

By Donna Sammons

ACCOUNTING FOR GROWTH

Accounting firms, large and small, are battling for the business of small business. What do these firms really have to offer?

In 1977, when Heath L. Kline, chief executive officer of Priority One Electronics, hired Neal Elias, the head of a small certified public accounting firm, he thought he had his accounting problems licked. Elias would provide Priority One, a wholesale distributor of computer components in Chatsworth, Calif., with tax, auditing, and accounting services, as well as act as an all-purpose business adviser. But with Priority One's sales growing at more than 134% compounded annually, the job became too much for one man to handle. So, in 1983, Kline decided to hire another accounting firm to help out. The only question was, which one?

Letters were sent out to Big Eight accounting firms, asking if they had any interest in serving Priority One. Although Kline knew the Big Eight firms were courting smaller companies, he was surprised by the intensity of their response.

"They wanted us, and they let us know they wanted us," Kline remembers. "Immediately, they called and asked, 'Can we get to you today? Tomorrow?' They inundated us with booklets, then told us this was just the beginning of what they could provide. They spent hours learning about our particular business, then talked with me in person. They asked us if we had questions, then called to see if we had more questions." In the end, Kline settled on Arthur Young & Co. "They called the most often—as late as 10 p.m.," Kline says. "It's their persistence that did it."

Ten years ago, such dogged pursuit of a small company's business by Big Eight accounting firms was unusual, despite the fact that, under the American Institute of Certified Public Accountants Code of Professional Ethics, CPA firms could respond to inquiries from prospective clients. Direct solicitation *was* prohibited, but that part of the hallowed canon is kaput, thanks to a 1977 U.S. Supreme Court ruling that allows professional service firms to advertise. The present AICPA code permits CPAs to make cold calls on prospective clients, conduct direct-mail campaigns, and even take out ads in newspapers and magazines.

In short, accounting firms are now doing what other businesses have been doing for years—competing. They are pressing the flesh, engaging in price wars, trying to out-razzle-dazzle each other. Out are the green eyeshades. In are words like "marketing," "targeting," and even, in certain circles, "penetration." As Richard A. Connor Jr., of CPA Marketing Systems (a division of Synergy Corp.), a consulting firm in Springfield, Va., says, "Some of these firms are real piranhas."

With their new-found aggressiveness, the accounting firms hope to gain a chunk of the small business market—something they considered "small change" just a few years ago. "The Big Eight," Connor says, "knows what it's looking for—tomorrow's Apple, Xerox, or IBM."

And to find them, they're going to great lengths, as the case of Deloitte Haskins & Sells's hot pursuit of Catalyst Technologies Inc., in Sunnyvale, Calif., illustrates. About two years ago, Jack Peth, the partner in charge of small-business services for Deloitte in San Jose, Calif., heard about Catalyst, a company that nurtures startups by providing them with centralized financial and clerical services for 6 to 18 months. After that, they strike out on their own. Great idea, Peth thought. Great source of new clients, his colleagues at Deloitte agreed.

Landing the Catalyst contract became, for Peth, a mission. His first step was to meet with John Anderson, Catalyst's executive vice-president, then with Nolan Bushnell, the corporation's founder and owner. Would those two men consider hiring just one accounting firm to serve all the companies under Catalyst's wing? Peth wanted to know. They would, Anderson and Bushnell responded. So Peth set out to assemble an "engagement team," Deloitte's version of a strike force.

"We had two tax people, two or three small-business department personnel, a management consultant, all the people we thought we would need to be responsive to Catalyst's management," Peth recalls. "We wanted to have enough contact with them, [because] we knew they weren't going to make a decision in a one- or two-hour meeting."

On that point, he was correct. It took Catalyst three months to decide to hire Deloitte. Before the search was over, Catalyst's management had spoken with each of the Big Eight firms, including Arthur Young, which handles Nolan Bushnell's personal finances, and Peat, Marwick, Mitchell & Co., which serves another of Bushnell's companies, Pizza Time Theatre Inc.

But Deloitte hung in. Its CPAs conducted lengthy meetings with Catalyst's management, quoted a fee below its normal rates (it won't say how much), and offered an "on site approach." This included establishing a permanent office at Catalyst's Sunnyvale facility, with a Deloitte staff member present several days a week.

What is happening with the Fortune 1,000 is what I call zero sum growth. Their clients aren't growing, so the accounting firms aren't getting anywhere, either. They need small business.

—Richard A. Connor Jr. of CPA Marketing Systems

Why go to such lengths for a single company—even one with the potential of generating additional business? Accounting firms, particularly the Big Eight, *have* to. After years of kowtowing to the largest corporations, the Big Eight is finding it hard to expand. "What is happening with the *Fortune* 1,000 is what I call zero sum growth," says Connor of CPA Marketing Systems. "The accounting firms—because their clients aren't growing—aren't getting anywhere, either. They need small business."

Connor isn't talking out of school. The Big Eight admits they have a problem. "We're not going to increase our chargeable hours by trading *Fortune* 500 companies," says Howard Miller, Peat Marwick's national partner in charge of Private Business Advisory Services, echoing the sentiments of his peers. "The only way we're going to increase our chargeable hours is to have more clients, and clients that are growing."

But local, regional, and Second Tier firms need the business of small business, too. "In the state of Virginia in 1982," says Connor, "owner net income dropped or leveled off in roughly 70% of the accounting firms. It's getting critical out there."

That is bad news for accountants, certainly, but it is good news for smaller companies. The reason? The stiff competition is having the same effect on accounting as it has on other industries. It is producing improved service, and it is prompting good old-fashioned rate wars. In short, small businesses can now demand—and get—more attention from their accountants. And they can, if they are in the market for a new CPA, be courted by the country's most prominent firms. "The biggest benefit from all the increased competition," says Robert Owen, the partner in charge of Arthur Young's Entrepreneurial Services Group, "is that small companies have been educated to the fact that there are tremendous resources available at a reasonable cost."

Traditionally, small companies regarded small CPA firms as their accountants of choice, but no more. "In the old days," says Catalyst's Anderson, "if you started a new company, you used the CPA firm you always used. Now firms have to bid for your business and make a strong effort to keep it. It's a lot tougher for them now. They have to continue to sell and prove themselves."

Touting their new "small business teams" is one way the Big Eight are selling themselves to small companies. Touche Ross & Co. ballyhoos its Private Companies Advisory Services Group. Coopers & Lybrand talks up its Emerging Business Services, and Price Waterhouse trumpets its Comprehensive Professional Services. At Peat Marwick, the emphasis is on Private Business Advisory Services, and at Arthur Young, it is the Entrepreneurial Services Group. The names of the Big Eight's small-business teams may differ, but, in truth, they are all the same.

Local, regional, and Second Tier firms, on the other hand, don't have small-business departments. They don't need them, they insist, because their entire practice is at small business's beck and call. But, like the Big Eight, they have jumped into the promotional fray to get small companies' attention. One firm, Kennedy/Chaintreuil & Bailey in Rochester, N.Y., has even offered clients free use of its paper shredder (12 takers, so far).

The list of tools most accounting firms now use to court small companies reads like a page from Marketing 101—surveys, speeches, seminars, direct selling, brochures, newsletters, and advertising. Much of the advertising to date has been "institutional," geared to improve name recognition. But some ads are quite specific. Oppenheim, Appel, Dixon & Co. in New York City, for instance, wants to be known as the accountant of the financial services companies, and it advertises accordingly. "When it comes to the securities and brokerage industries," the firm said in a recent ad, "OAD's a guiding principal. We do more work and have more top people in these industries than any comparable firm."

An equally straightforward approach is taken by Clifton, Gunderson & Co. Shortly after opening an office in Chicago, it took out an ad in a regional business publication, saying, "Should your business be making more money? Our management advisory services team can help. . . . An operational review can identify weaknesses in your organization and provide assistance to maximize effectiveness and efficiency and, as a result, improve profitability."

In Alexander Grant & Co.'s new ads, the firm promises to turn small companies' bookkeeping departments into profit centers with its new microcomputer system. One of the ads has a picture of a darkened building with a lone office's windows lit. Inside stands a weary executive. "It's 10 p.m.," the ad states. "Unfortunately, you do know where your controller is."

There is no hard evidence that small companies sign on with a given firm because of its advertisements, brochures, or seminars. But in the hope that there is a correlation, accounting firms are pumping hundreds of thousands of dollars into marketing efforts. Coopers & Lybrand publishes *Emerging Business: Washington Newsletter* and *Executive Alert Newsletter*, two monthly publications aimed at the small-business market. Ernst & Whinney publishes *Ideas*, a semiannual magazine for the "owner/manager" of privately owned businesses, and Touche Ross has *Private Companies Review*, a newsletter published bimonthly. Arthur Andersen & Co.'s monthly publication for closely held businesses, *The Insider*, competes with Main Hurdman's bimonthly *Executive Action Report*.

With its seminars, Touche Ross is teaching small companies "money-making, money-saving strategies that can be put to work immediately," says Harvey Braun, national director of client services and development. Two examples, he says, are the conferences the firm held last year in Rochester, N.Y., and Houston. Their purpose was to show business how to apply for a $50,000 grant through the Small Business Innovation Research Act of 1982.

Kamanitz, Freiman & Uhlfelder in Baltimore sponsors seminars, one of which is designed to acquaint clients' spouses with tax, financial, and estate planning. Fox & Co. is reaching out with its workshops to the increasingly large market of women professionals. It is also co-sponsoring seminars with brokerage houses and regional banks on tax and finance topics.

For all the accounting firms' hoopla in going after small business's business, however, the services the large CPA firms provide aren't that different from those offered by smaller firms. And there is a reason. Accountants are a homogeneous group. They make their livings following "Generally Accepted Accounting Princi-

> *With the two smaller firms [we had previously employed], we spent all our time teaching them. With the larger firm, we get advice, feedback. The Big Eight can compare us with others.*
>
> *—Patti McVay of Fifth Season Travel*

John Stanley/Black Star

ples," and that, by itself, precludes much individuality. As John A. Thompson, Main Hurdman's managing partner and CEO, notes, "We sell a generic product."

What the Big Eight accounting firms, as a group, offer small growth companies are contacts—contacts with underwriters, bankers, and venture capitalists. When a company goes public, most underwriters insist that it hire a Big Eight accounting firm to audit its financial statements—even if, like Telecommunications Specialists Inc., based in Houston, it doesn't want to. "But we're no fools," says Robert Resnick, president and CEO of the $24-million-a-year company. "If it'll help us appeal to investors, we'll have to spend the additional money to secure a Big Eight."

The Big Eight, many people claim, has an "in" with the Securities and Exchange Commission. "The SEC will deny it, I'm sure," says M. William Benedetto, executive vice-president and manager of corporate finance for Dean Witter Reynolds Inc., in New York City, "but, yes, processing is quicker with a Big Eight."

Nonsense, says the SEC. "If a small company asks, 'Do we need a Big Eight or a Second Tier firm to go public?' " William Wood, associate director of the SEC's Division of Corporate Finance in Washington, D.C., says, "our answer is no."

Underwriters also insist on large accounting firms for public stock offerings because, they say, a Big Eight name adds credibility to a company's financial statements. Insists Thomas I. Unterberg, chairman and senior managing director of L. F. Rothschild, Unterberg, Towbin, the Wall Street investment banker, "Big Eight instills confidence in investors."

Actually, a Big Eight firm instills confidence in *underwriters*. "To reduce uncertainty, you shoot for a large firm," says Bob Pangia, vice-president of Kidder, Peabody's technology group. A similar point is made by Michael Roberts, senior vice-president of Smith Barney Harris Upham, and Benedetto of Dean Witter. "The first question asked if something goes wrong is, 'Why didn't you go with the big guy?' " notes Roberts. "Frankly," says Benedetto, "I wish there was a way around this [Big Eight] orientation. But there's a legal risk. Without a Big Eight, we're more open to liability."

Underwriters, Benedetto points out, have reason to be squeamish. When they value a company, they use numbers provided by accounting firms. Mistakes by those firms can prompt investment bankers to sell the stock at the wrong price, and, for that, underwriters can be sued.

Like underwriters, bankers believe that Big Eight accounting firms add a stamp of integrity to a company's financial statements. Unlike underwriters, they don't insist on a Big Eight firm. "At first blush, it's nice to have a Big Eight firm, but a Second Tier firm is fine with me," says Daniel W. McLaughlin, a vice-president of Chase Manhattan Bank in New York. "It's when you get down to the three-person shops and 'home accountants' that I worry."

Whether a large national accounting firm can improve a company's relationship with its bank depends, in part, on where that corporation is located and the size of its lending institution. "Our loan limit to any individual customer is $5 million," notes Hal Dumler, vice-president of The First National Bank of Topeka, Kans. In his mind, a company applying for that size loan doesn't need a national accounting firm.

But some bankers, like those at Chase Manhattan, actually go out and meet their clients' accountants. "We want to know if they do more than just minimal Generally Accepted Accounting Principles," says McLaughlin of Chase Manhattan. "Do they indeed go through the inventory? These are questions we ask."

National accounting firms' influence with banks varies by the lending institution. Some banks look to accounting firms for referrals and maintain close ties with them, others don't. First Federal of Pittsburgh estimates that 15% of its referrals come from accountants. On the other side of the coin, Don Stout, senior vice-president of the banking operation division of Georgia Federal Bank in Atlanta, insists, "We don't expect accounting firms to refer clients to us."

With venture capitalists, it is a different story. They do expect accountants to refer businesspeople to them. "There's a very definite symbiotic relationship between venture capitalists and the accounting firms," says Rodney L. Goldstein, a partner in Frontenac Venture Co. in Chicago. "We tend, as an industry," he adds, "to take very little for granted. If we know someone or some firm is good, that feels better."

What that means, of course, is that venture capitalists prefer to work with big-name firms. "A company should go first class all the way," says C. Richard Kramlich, managing partner of New Enterprise Associates, a venture capital firm in San Francisco. "First class means the Big Eight."

But venture capitalists don't always insist that their clients employ the largest accounting firms. "We don't push for any one type of firm," says Charles Coulter, president of American Research and Development, a Boston venture capital firm. "We recognize the value of a Big Eight and a Second Tier, but we want our clients to get good value for their money." In fact, about half of the companies American Research funds employ Big Eight accountants.

One corporation that kept its regional firm did so only after convincing its venture capitalists, Frontenac Venture and Golder Thoma & Co., that the CPA had "industry specific" information. "I think it's a damn shame," says Marcus Kostolich, CEO of Bulk Logistics Inc., a freight-forwarding company incorporated in Chicago in the summer of 1983, "that the smaller firms are discriminated against for doing good jobs for companies like us."

Another reason Kostolich's regional firm, Mueller, Hillsman & Co., won points from the venture capitalist was its relationship with Coopers & Lybrand. The regional accounting firm, as a rule, calls in Coopers when a project gets too big for it to handle.

The practice of small and large accounting firms working cooperatively on projects is growing more common. In Detroit, for example, Touche Ross has entered into an agreement with Rehmann, Robson, Osburn & Co. of Saginaw, Mich., to jointly provide tax, audit, and management consulting services to businesses in the mideastern region of Michigan's lower peninsula.

These arrangements make good sense for all parties involved. The national accounting firm provides the services that aren't available from the regional firm and, in that way, gains access to new clients. The regional firm, meanwhile, keeps its

> ***The biggest benefit from all the increased competition is that small companies have been educated to the fact that there are tremendous resources available at a reasonable cost.***
>
> *—Robert Owen of Arthur Young*

client base stable and out of the clutches of the Big Eight, and small business is able to tap the expertise it needs without shifting to another firm. Bankers and venture capitalists like the idea, too. "There are a lot of businessmen who don't want a Big Eight, and we don't demand they get one," says McLaughlin of Chase Manhattan. "But to our smaller companies we say, look, keep your three-person shop, make them the internal accountants, then bring in Ernst & Whinney. Split your fee."

Fee, as might be expected, is another hot issue. Smaller accounting firms generally charge less than the Big Eight or Second Tier, but there are signs that the gap between the large and small firms' fees is narrowing. Kline of Priority One Electronics pays its local CPA more ($100 an hour) than it does Arthur Young ($80 an hour on average).

Almost all of the Big Eight firms concede that, to secure an account, they will "buy into" it, meaning they will provide accounting services at cut-rate prices, sometimes below cost. There are even reports of low-balling, although some firms, like Coopers & Lybrand, deny that they take part in the practice. "I've heard that for several years now," says Peter R. Scanlon, Coopers & Lybrand's chairman, of the rumor that his firm low-balls. "When you're successful, people have to find some way to take shots at you."

Scanlon may be right, but the price competition is real, and shopping around can result in real savings for small businesses. The CDX Corp. in Aurora, Colo., switched from Deloitte to Weiss Carr & Co., a local firm, and, in doing so, reduced its accounting bill by more than $5,000—with no noticeable decrease in the quality of services. The U.S. Mineral and Royalty Corp., in Oklahoma City, chopped its auditing bill in half when it dumped Arthur Young for a local firm, John L. Quaid in Wewoka, Okla. Edgewood Bancshares Inc., in Countryside, Ill., cut 25% to 30% from its accounting costs by switching from Peat Marwick to Deloitte.

Connor of CPA Marketing Systems recounts the case of a Big Eight firm that wanted a contract so desperately that it gave the audit away for $1 (it hopes to make up for its losses in management consulting fees). He also cites the experience of a small chemical company in Maryland. The company asked Big Eight accounting firms to submit bids for an audit. When the bids came in, they ranged from $3,700 to $12,700. The low bidder even offered free tax services.

Oddly enough, Maryland isn't even one of the areas where competition among accounting firms is especially tough. That list, says Richard A. Levine, national director of management consulting and marketing for Main Hurdman, includes New York City, Chicago, Boston, Seattle, Dallas, and, of course, Silicon Valley. In Dallas, the competition is so stiff that accounting firms are setting up shop in North Dallas, just 10 miles from their downtown offices.

The opening of additional offices is just another way the Big Eight and Second Tier are selling themselves to small business. The new facilities, they argue, enable them to "be closer" to small companies. In the past year alone, Peat Marwick branched out to three new locations. Ernst & Whinney, however, maintains the largest number of offices, with 112 locations (see table, page 82), followed by Deloitte (102), Peat Marwick (97), and Coopers & Lybrand (94). Main Hurdman, a Second Tier firm, ranks seventh in offices (84).

□

The one peculiar twist in the current competitive sweepstakes is that the Big Eight can't agree on a definition of small business. At Arthur Young and Ernst & Whinney, small companies have revenues of under $50 million. Price Waterhouse and Coopers & Lybrand, meanwhile, don't measure revenues at all. Instead, they look at the client's "service needs." The lack of a consensus definition, critics say, is a sign that the firms don't understand small companies.

Aside from that, small business's principal complaint about the Big Eight is that too much of the accounting work is performed by people fresh out of school. "The Big Eight," says McLaughlin of Chase Manhattan, "often sends out recent business school graduates" to serve clients. Comments Resnick of Telecommunications Specialists, "Using a Big Eight, we're a small fish in a big pond. And the work at a Big Eight is handled by associate people. You get textbook accounting. You're dealing with college graduates with three to five years of business experience."

Richard Thalheimer, president of The Sharper Image, a $100-million-a-year mail-order company in San Francisco, found this generalization alarmingly on target. "I walked into Price Waterhouse one day," he remembers, "and I saw one of the new accountants reading *Accounting Standards*. He had the book opened to the chapter entitled 'Inventory,' and he was reading the first sentence. I thought to myself, 'Why do I need to pay all this money for someone who is still reading his business right out of a book?' "

□

An accountant, the old joke has it, is someone hired by successful people to explain to the government how they did it. But, as many small companies know, CPA firms do more than correspond with the Internal Revenue Service. Accountants, as a rule, are the principal outside financial advisers of small business. Sometimes the advice accounting firms provide is good—as in the case of Century Industries Inc., a wholesale distributor of hardware and building products in Milwaukee. And sometimes it is bad, as the story of Fifth Season Travel Inc., in Indianapolis, illustrates.

When Bob Hillis became Century Industries's chief financial officer, he found that the company's books were a mess, so he hired Arthur Andersen to straighten them out. The firm ended up helping Hillis structure a leveraged buy-out and negotiate a way for the company to escape tax penalties that had accrued as a result of problems with its profit-sharing plan and state income taxes.

"It's safe to say we probably wouldn't exist today if it hadn't been for Arthur Andersen's help," says Hillis, now CEO of the $35-million-a-year company. "It cost a lot, that's for sure, but then it's worth the money when the life of your business is at stake."

Fifth Season Travel, on the other hand, didn't survive because of its accountants. It survived in spite of them. In 1977, when Patti McVay joined the financially troubled company, her two-man CPA firm was pessimistic about the future. "We were looking at how we might save the company," McVay remembers. "They were looking for graceful ways out."

So she hired another firm, but it, too, advised her to throw in the towel. McVay

GO PUBLIC, GO BIG EIGHT?

Norman Stavisky, a partner in the Boston accounting firm of Stavisky, Shapiro & Whyte, leaned back and laughed. "Look at that!" he said, nodding toward a dog-eared copy of *Time* magazine. On *Time*'s cover was a drawing of *Star Wars* archvillain Darth Vader. Across it was pasted the headline, "N. Stavisky Strikes Back!"

Clearly, someone admired Stavisky's chutzpah—and no wonder. In late June, Stavisky, Shapiro & Whyte did what few in the accounting profession have dared to do. The firm sued a Wall Street investment banker, Ladenberg, Thalmann & Co., over the loss of a client. It also sued the client, Kevlin Microwave Corp. in Woburn, Mass., for breach of contract.

Kevlin, a $6-million-a-year designer and manufacturer of microwave devices for radar systems, engaged Ladenberg Thalmann late last spring to underwrite an offering of its common stock. Then Ladenberg Thalmann instructed Kevlin to hire a big-name certified public accounting firm to audit the company's 1983 financial statements.

When Stavisky heard that Kevlin, his client since 1980, had retained Arthur Andersen & Co., he was livid. "James Galbraith hired me, and I want a letter from him telling me I'm fired and why," Stavisky told Kevlin Microwave's controller. In response, Galbraith, the corporation's chairman and chief executive officer, wrote, "It is with great regret that I inform you of [our] decision to change auditors. . . . We made this decision solely on the basis of underwriters' opinions that we must have a larger and more well-known accounting firm to express an opinion on our financial statements for our prospective public offering."

Galbraith's letter, delivered by messenger on June 6, did little to diffuse Stavisky's anger. In fact, it made him more furious. He decided—and his partners agreed—that he should contact the firm's attorney, William F. Macauley.

Later that week in Macauley's office, Stavisky recounted the tale of the lost client. Last spring, Stavisky explained, Kevlin began negotiating with investment bankers for an offering of its common stock. Stavisky, Shapiro & Whyte hoped that it would remain Kevlin's accounting firm and audit the corporation's 1983 financial statements.

However, Kevlin refused to sign an engagement letter (which is the equivalent of a contract) retaining Stavisky's firm for another year. It would not do so until Stavisky, Shapiro & Whyte was approved by the investment banking firm chosen to underwrite the stock. "I could understand that," Stavisky said later. "Sometimes an accounting firm is replaced by a Big Eight accounting firm during the time of an offering. Then the small accounting firm gets its client back."

Soon, Stavisky got word that he and his partners were being "checked out" by Burgess & Leith Inc., one of the underwriters with whom Kevlin was negotiating. Still, Stavisky thought, there was no need to worry. The worst that could happen, he reasoned, is that a large, national accounting firm might be brought in on a temporary assignment.

But even that fear dissipated quickly. Within a few weeks, Stavisky was told that Burgess & Leith had given his firm "high marks." Then, on May 4, Galbraith, Kevlin's chairman and CEO, signed the engagement letter retaining Stavisky, Shapiro & Whyte for another year.

With the letter in hand, Stavisky put his staff to work on Kevlin's audit. "We had people hopping," he remembered. Then the trouble began. In a brief telephone conversation on June 2, Stavisky was informed that Arthur Andersen was Kevlin's new accountant and auditor. Stavisky demanded a letter of explanation from Kevlin and got one, four days later.

What, Stavisky asked, did Macauley think of all this? "I have a very conservative attorney, and I really thought he was going to downplay it," Stavisky said of Macauley. "But he came back and told me and my partners that we had a prima facie case and that it was a wrong that should be addressed."

So, on June 28, Stavisky's accounting firm filed suit against Ladenberg Thalmann and Kevlin Microwave, seeking more than $10 million in damages from its ex-client and its ex-client's underwriter. The action, brought in Suffolk Superior Court in Boston, charges Ladenberg Thalmann with "malicious interference with Stavisky, Shapiro & Whyte's contractual and advantageous business relationships," and alleges that Kevlin Microwave breached its contract. The suit asks for a jury trial. So far, no date has been set.

What makes the Stavisky suit important is that it challenges underwriters that insist that companies switch to large, preferably Big Eight, CPA firms when they go public. The practice, accountants agree, is widespread.

Will the suit make a difference? Opinions on that score are divided.

Ed Malitsky

Norman Stavisky did what few would dare: His accounting firm sued a Wall Street investment banker over the loss of a client.

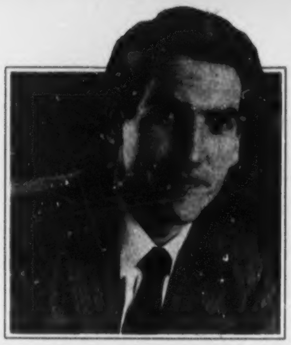
"Until the suit gets resolved, the fact of life is that if you're going to go public, or if you're going to go for big financing, 9 out of 10 banks are going to say go Big Eight, or the next two or three, the Main Hurdmans," says Richard A. Connor Jr., of CPA Marketing Systems in Springfield, Va. "This suit will make underwriters think twice before they insist on a Big Eight firm," counters Chuck Kaiser, the national managing partner of Pannell Kerr Forster, a Second Tier firm. "What will happen is that underwriters may look more at the professional qualifications of the auditor, rather than at the size of the auditor." He adds, "Big Eight auditors *are* bigger, but that doesn't mean they're better."

Kevlin Microwave and Ladenberg Thalmann, for their part, decline to comment on the case. As for Stavisky, he insists, "This is not a crusade for my profession. This is a matter of principle. If my clients don't like balding, chubby, Jewish accountants, they should have the right to change. But they shouldn't have the right to breach their contracts. And someone else shouldn't have the right to *get* them to breach their contracts."

Stavisky isn't alone in his thinking. Since the suit was filed last summer, the 48-year-old accountant has received a fair share of fan mail. Some people have even sent donations to help defray legal costs. Stavisky won't say how much he has received, but he notes that the smallest check was for $100.

I walked into Price Waterhouse one day and saw one of the new accountants reading Accounting Standards. *I thought to myself, Why do I need to pay all this money for someone who is still reading his business out of a book?*

— Richard Thalheimer of The Sharper Image



refused, and stuck to her strategy. Fifth Season Travel would prosper, she was convinced, by concentrating on business rather than vacation travel, and she was right. Today, the company's annual sales top $30 million, and it ranks third on the 1983 INC. 500 list of the country's fastest-growing privately held companies. As for accountants, Fifth Season has a new firm—Arthur Young.

"With the two smaller firms, we spent all our time teaching them," McVay explains. "With the larger firm, we get advice, feedback. The Big Eight can compare us with other travel agencies. They suggest operating forecasts and plans. They tell us to think about fringe benefits, better records filing, computers. An auditing firm," she adds, "can be more useful as a counselor than as an auditor." Resnick of Telecommunications Specialists agrees. "Auditing," he says, "could basically be done by a gorilla."

CONSULTING VS. AUDITING: HOW THE MAJORS RANK

	% of gross fees		
	Mgmt. advis. services	Accntg. & auditing	Tax
Arthur Andersen	27%	52%	21%
Pannell Kerr Forster	18	63	19
Laventhol & Horwath	17	62	21
Peat, Marwick, Mitchell	16	59	25
Ernst & Whinney	15	65	20
Coopers & Lybrand	14	66	20
Touche Ross	13	64	23
Kenneth Leventhal	12	62	27
Arthur Young	12	64	24
Price Waterhouse	12	67	21
Baird, Kurtz & Dobson	11	57	32
Alexander Grant	10	65	25
Deloitte Haskins & Sells	8	73	19
Clifton, Gunderson	5	61	34
Fox	4	65	31
Main Hurdman	4	69	27
McGladrey Hendrickson & Pullen	9	57	34
Seidman & Seidman	4	60	36
Cherry, Bekaert & Holland	2	71	27
Oppenheim, Appel, Dixon	2	55	43

Source: American Institute of Certified Public Accountants

WHO AUDITS THE INC. 500?

	No. of INC. 500 companies
Arthur Andersen	26
Coopers & Lybrand	22
Touche Ross	16
Deloitte Haskins & Sells	14
Price Waterhouse	13
Alexander Grant	13
Arthur Young	12
Peat, Marwick, Mitchell	12
Ernst & Whinney	11
Laventhol & Horwath	5
Main Hurdman	4
Pannell Kerr Forster	4
McGladrey Hendrickson & Pullen	2
Cherry, Bekaert & Holland	1
Seidman & Seidman	1
Big Eight	126
Second Tier	30
All others	344

Source: INC.

HOW THE ACCOUNTING FIRMS STACK UP

	No. of pros		No. of partners		No. of employees		No. of offices		No. of SEC clients	
Arthur Andersen	(1)	12,251	(2)	1,076	(1)	15,837	(10)	66	(1)	1,900
Peat, Marwick, Mitchell	(2)	9,905	(1)	1,284	(2)	12,200	(3)	97	(6)	919
Ernst & Whinney	(3)	8,320	(3)	1,058	(4)	10,620	(1)	112	(5)	961
Coopers & Lybrand	(4)	7,227	(4)	923	(3)	10,706	(4)	94	(4)	989
Price Waterhouse	(5)	7,000	(7)	629	(6)	8,500	(5)	87	(3)	1,005
Deloitte Haskins & Sells	(6)	6,350	(5)	794	(5)	8,794	(2)	102	(2)	1,466
Arthur Young	(7)	4,959	(6)	741	(7)	7,413	(6)	86	(8)	553
Touche Ross	(8)	4,680	(5)	794	(8)	7,085	(8)	81	(7)	723
Main Hurdman	(9)	2,242	(8)	523	(9)	3,506	(7)	84	(9)	219
Alexander Grant	(10)	1,645	(11)	340	(11)	2,485	(11)	60	(11)	180
Laventhol & Horwath	(11)	1,485	(10)	343	(10)	2,826	(14)	41	(10)	185
Pannell Kerr Forster	(12)	1,000	(14)	148	(14)	1,127	(15)	40	(17)	32
Fox	(13)	985	(12)	254	(13)	1,805	(12)	57	(12)	129
McGladrey Hendrickson & Pullen	(14)	930	(9)	412	(12)	2,049	(9)	78	(14)	52
Seidman & Seidman	(15)	662	(13)	176	(15)	1,117	(16)	37	(13)	62
Oppenheim, Appel, Dixon	(16)	437	(15)	77	(16)	747	(13)	52	(18)	25
Kenneth Leventhal	(17)	320	(18)	47	(17)	487	(19)	11	(15)	36
Clifton, Gunderson	(18)	225	(16)	60	(18)	400	(17)	23	(20)	4
Baird, Kurtz & Dobson	(19)	192	(17)	58	(19)	328	(18)	14	(19)	7
Mann Judd Landau	(20)	150	(19)	30	(20)	180	(20)	8	(16)	35

In the eyes of small business, what separates CPA firms is not the tax, accounting, and auditing work they perform, but the management advisory services they provide. When Kline of Priority One Electronics needed management people, Arthur Young provided assistance. Its headhunters delivered a handful of résumés. When Ted Fonk, president of Colorado Lace & Dry Cleaning Co., a 20-store chain in the Denver area, decided to purchase software for his microcomputer, he called in Alexander Grant to help him choose appropriate programs.

"The accounting firms," says Peter B. Wilkinson, a marketing management consultant for CPA firms in Paoli, Pa., "are going back to the original purpose of accounting, which was to help somebody run his business."

What should small companies expect from their CPAs? That they speak their language, not legal or tax jargon, that they provide timely and continuous attention, that they understand the company's business, and that they provide good advice, says Maurice J. Whalen, managing partner of the Washington, D.C., office of Fox & Co. To that list add personal involvement of the partners, assistance with banking relationships and with others in the financial community, personal financial planning, skills in business analysis and planning, and problem solving.

The competition for the business of small business is prompting the CPA firms to take note of the way they treat their small clients. And it is making it easier for small businesses to change CPA firms without bankers, venture capitalists, or underwriters suspecting that something is wrong. "Now, in the hustle for clients," says Pangia of Kidder, Peabody, "it's perfectly kosher to switch." ☐

Research assistance was provided by Susan Buchsbaum.

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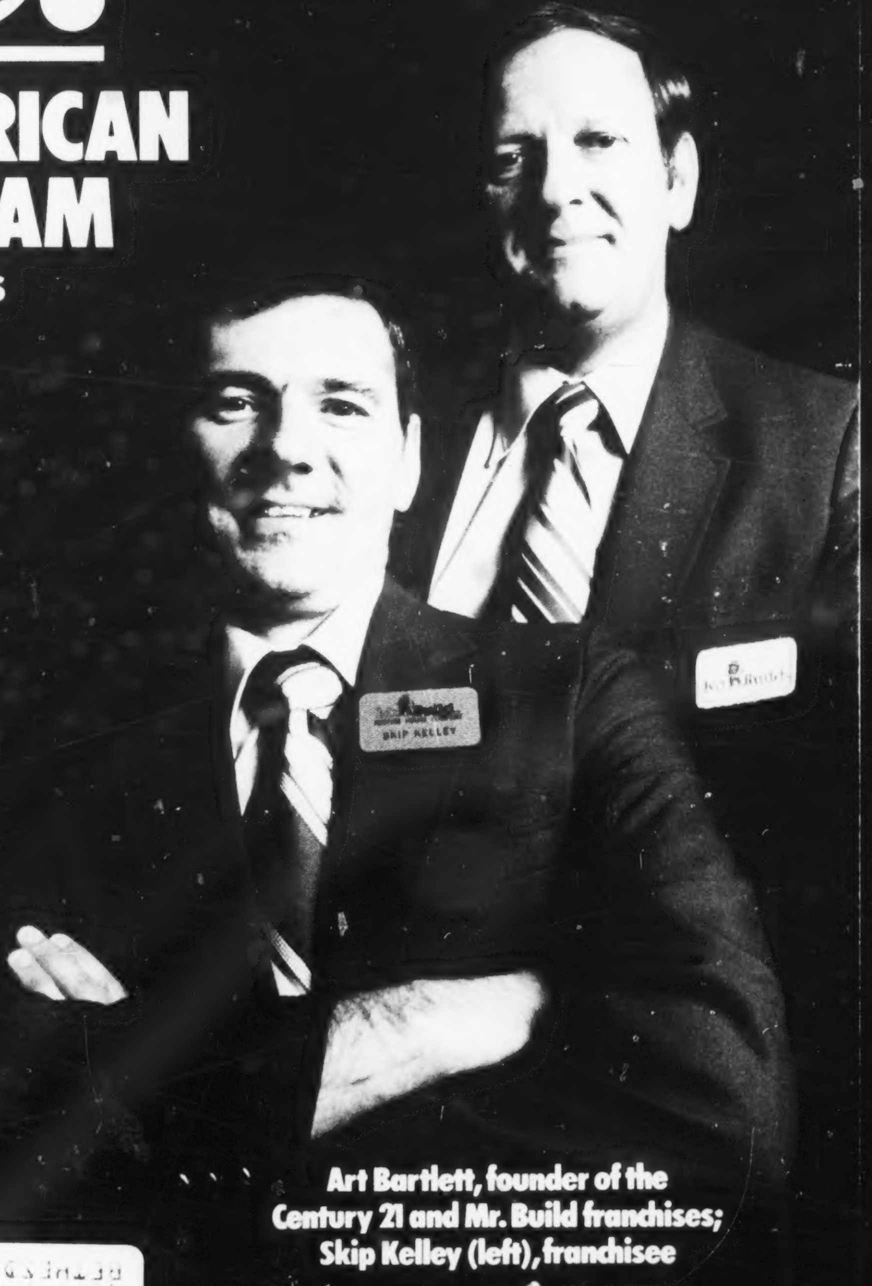

Art Bartlett, founder of the Century 21 and Mr. Build franchises; Skip Kelley (left), franchisee

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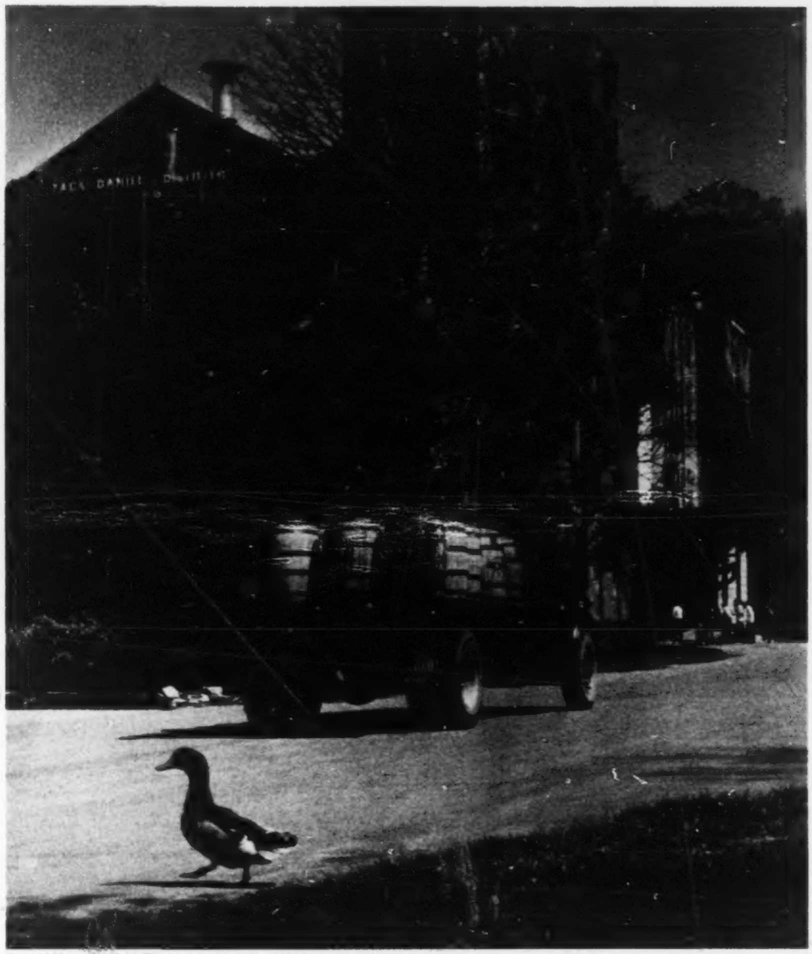

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SURPRISE! SURPRISE!

Roseann Schwaderer and Marion McGrath are mad as hell, but there is not much they can do about it. In January, their printing and typesetting company, Serif Press Inc., was socked with an unemployment-tax bill that included a surcharge of $693, and all because the company is located in Washington, D.C.

You see, the District of Columbia didn't have enough money to cover unemployment compensation claims, so it borrowed some from the federal government. The problem is, it did not pay the loan back in time. And it was not alone. Puerto Rico, the Virgin Islands, and 13 states also failed to repay their unemployment compensations loans by the November 9, 1983 due date.

Granted, the problems may have something to do with continued high unemployment, but some states—Connecticut, for example—have not repaid money they borrowed during the *previous* recession. All this adds up to a staggering debt of $11 billion owed by the 16 delinquent jurisdictions to Uncle Sam.

Upset about this state of affairs, the U.S. Department of Labor imposed a surcharge on employers in these jurisdictions. As a result, there were a lot of companies like Serif Press that found themselves with an unexpectedly large bill to pay in January 1984, when they mailed in their last quarterly unemployment tax form for 1983.

WHO PAYS?

In January 1984, employers in 16 jurisdictions had to pay an unemployment tax surcharge for 1983. The 1984 surcharge will apply to employers in 22 jurisdictions.

	Extra unemployment tax per worker	
	1983	1984
Arkansas	$42	$63
Colorado	-	21
Connecticut	49	70
Delaware	42	63
Dist. of Columbia	77	98
Illinois	49	70
Iowa	-	21
Kentucky	21	42
Louisiana	-	21
Michigan	42	63
Minnesota	42	63
Missouri	-	21
New Jersey	42	63
Ohio	42	63
Pennsylvania	49	70
Puerto Rico	42	63
Rhode Island	42	63
Texas	-	21
Vermont	42	63
Virgin Islands	42	63
West Virginia	42	63
Wisconsin	-	21

Source: Eric J. Oxfeld, U.S. Chamber of Commerce.

"To a business our size," notes Schwaderer, whose company has nine employees, "surprise costs are harsh. Whenever we get hit with taxes we aren't expecting, it makes it hard on us and our cash flow."

As it turns out, Washington, D.C., employers were the hardest hit, with a surcharge of $77 per employee. In Connecticut, Illinois, and Pennsylvania, the surcharge totaled $49 per worker, notes Eric J. Oxfeld, employee-benefits attorney for the U.S. Chamber of Commerce. In Kentucky, businesses got off relatively easy, paying just $21 a person.

Next year's surcharges may be even higher, says Oxfeld, since the 16 delinquent jurisdictions aren't likely to repay the entire debt this year. In addition, other states, whose loans aren't due until late 1984, may be added to the list.

Then again, some states have little to worry about, at least for the moment. Maine, for one, has repaid the money it owes the federal government. Its 1983 surcharge amounted to zero.

—*Donna Sammons*

"The work ethic in Indiana is outstanding."

Ed McDonald
General Manager
Wavetek Indiana, Inc.
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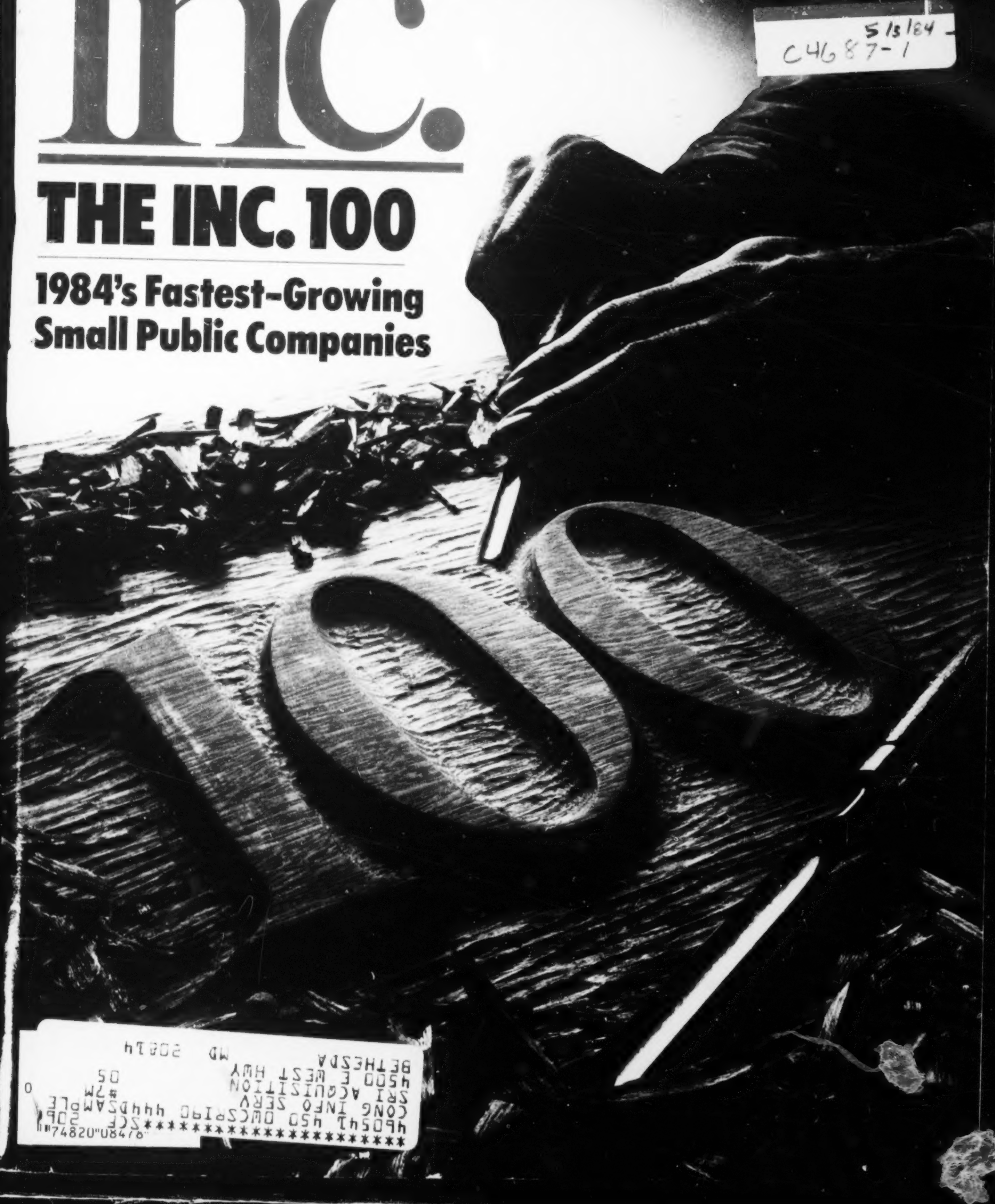

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SHOW AND SELL

Trade shows aren't just for backslapping anymore. Some companies have made them the focus of their marketing strategy.

By Susan Buchsbaum and Mark K. Metzger

Once a year, sales staffers of Acco International get a chance to ditch their business suits and show up for work in unusual, not to say fantastical, attire. In 1980, at the National Office Products Association (NOPA) show in Chicago, required dress was American cowboy, and the message was that Acco's market spans the continent. One year later, the sales staff appeared on the scene as firefighters; they worked out of the charred frame of their old booth and managed to spark interest in the company's line of office-protection products. The following year the affair was formal, with salesmen in white tie and top hats, bowing to Acco's theme, "Tomorrow's Office Products," or "T.O.P." At the NOPA show last October, the sales staff had settled into tennis whites. "It's Time to Proform" was the theme, an effective one as it turned out. During that one three-day show, sales for Acco—a $131-million full-line office-products manufacturer—hit an all-time record of $700,000.

Like many other companies over the past few years, Acco has discovered that trade shows can be much more than a beer-drinking, back-slapping good time. With some advance planning, they can fill a key role in a company's marketing strategy. In concert with print ads, direct mail, and telemarketing, trade shows can be used to identify potential customers, determine which products they are interested in, and target the prospects' authorized buyers.

This year, Acco will spend twice as much on trade shows as it did last year. Yet the real challenge, Acco executives say, is not just attracting attention with well-orchestrated theatrics, but in using the entire trade show effort to create effective one-on-one meetings between salespeople and prospects.

The substance of those meetings may vary from show to show. At the NOPA show, Acco's aim is to write a lot of orders for a new product or product line. At the Back-to-School Show, a smaller event held in New York City last February, the goal was to amass detailed information on serious sales leads.

By show's end, Acco had a few hundred sales prospects, most of them lined up the way Greg Hewitt, an Acco field sales manager, lined up Lionel Eltis. With a few studiously nonchalant questions, Hewitt determined that Eltis, the owner of a small chain of stores in Louisiana, could be a serious customer. Then Hewitt set to work, quickly but deftly eliciting everything he needed to know about Eltis's company—for example, its size, number of stores, and distributor operation—to set him up for a sales call. Before the conversation had ended, Hewitt had put Eltis's name, and the name of his buyer, on a standardized card that would soon go into Acco's sales system.

That done, Hewitt jockeyed Eltis back into the aisle and looked for his next prospect. The whole process was over in a couple of minutes.

If just three of the leads from the Back-to-School Show pan out, the show will have paid for itself, says Acco marketing manager William S. Carvell. The rest, as they say, is gravy.

Photograph by Oscar & Associates

CLOPAY
ABITIBI
Abitibi Building Center
82

Trade shows have served the company well. Acco, which came into existence in 1903 as American Clip Co., restarted its corporate life in 1971 when management executed a leveraged buyout from Gary Industries, creating an independent, privately held company. Since then, Acco has ridden the surging growth in the office-based information economy, expanding its product line to encompass nearly any item used in an office to bind, protect, or store. Last year the company (now public) unveiled its boldest new product line yet: furniture designed for use with the terminals, printers, and workstations of the electronic office.

As it grew, the company broadened its participation in trade shows, in a constant search for new outlets to promote its widening array of products. At the same time, it began to change its approach to the entire process, seeking more and more concrete results for its expenditures.

"Until the early 1970s, we went to trade shows more out of goodwill—to make an appearance, to maintain a presence," recalls William Walter, president of Acco's U.S. division. "We showed up, shook hands, conversed, that sort of thing." When the company eventually decided a more aggressive cost-effective approach was needed, it used trade shows as an opportunity to both promote existing products and introduce new ones. "Every year now, we sell more than the year before," says Walter.

Not every company can recount that record of success. But the trade show has become an increasingly popular marketing medium for companies in fields as diverse as coal mining and computers. The proliferation of products, the increasing complexity of the marketplace, and the rocketing costs of making a field sales call have all forced companies to reexamine their marketing strategies and, in many cases, to hike their commitments to trade shows. For example, by doubling its trade show budget this year, Acco has allocated as much for shows as for print advertising. A 1982 study by Data Resources Inc., a Lexington, Mass., consulting firm, reported that trade show expenditures logged a real increase of nearly 70% from 1974 to 1980, rising from $9 billion to $15 billion in inflation-adjusted dollars.

Robert M. Lightfoot III

Head start: *At Acco, William S. Carvell, marketing manager, begins planning for some shows six months in advance.*

While trade shows, with perhaps a few exceptions, cannot serve as the sole marketing vehicle for a company or even a product line, they do offer special opportunities for small, growing businesses. A good trade show brings together all the elements of a particular industry, from buyers to suppliers to investors, making it possible for a company with no name and no sales to develop both in a fairly short time. A company can yank a new product into the marketplace quickly, positioning it, demonstrating it to potential customers, gathering reactions and—if it is successful—organizing a network of dealers, all within the few days of a trade show. And on the exhibit floor, all companies are on a relatively equal footing.

"At a trade show, I can stand up and be counted with the big guys," says Graham Miller, chairman of LTX Corp., an $80-million-a-year semiconductor test equipment maker in Westwood, Mass. "I can create a company image that is, shall we say, 'anticipatory.' We can, quite simply, look bigger than we are."

LTX, founded in 1976, has had a strong commitment to trade show marketing from its inception. Like Acco, the company now spends as much on trade shows as it does on print advertising.

"When we were starting, we were operating out of a garage. If a customer went to

Oscar & Associates

"Until the early 1970s, we went to trade shows more out of good will—to make an appearance, maintain a presence," says the head of Acco's U.S. division. "We showed up, shook hands, that sort of thing. The company eventually decided on a more aggressive approach. Every year now we sell more than the year before."

visit IBM, he'd see a pretty impressive building. If a customer came to see us, he'd see a garage. I'd rather make our impression with a booth at a trade show, where we can look as good as the competition," explains Miller, an ebullient Britisher.

But the chief attraction for most companies is the simple cost-effectiveness of making sales contacts and presentations on the trade show floor. In 1981, it cost an average of $178 for a salesperson to make an industrial sales call, according to a study by the McGraw-Hill Laboratory of Advertising Performance. A 1981 survey by the Trade Show Bureau, an industry group, pegged the average cost of a trade show contact at just $68. Moreover, because so many attendees go to a trade show because they are actually ready to buy, it takes, on average, far fewer follow-up calls to close a sale to a lead generated at a trade show. Normal field sales calls often are made on the wrong people—those who are not authorized to make a purchase or who simply are not in the market to make one. McGraw-Hill calculated that it took 5.1 sales calls, on average, to close an industrial sale. A Trade Show Bureau report estimated that it takes, on average, 0.8 field sales calls to book an order from a trade show lead.

"I've heard estimates of the cost of a sales call as high as $250," says Acco's Carvell. "A trade show, whatever the specific figures, is a very economical way to make contacts."

☐

Those inherent advantages can be fully exploited only through careful planning—a step that many companies overlook or underemphasize. For Acco, however, planning is a priority, and it starts months ahead of time, in a series of meetings at Acco U.S. headquarters in Wheeling, Ill., a rustic suburb northwest of Chicago. Discussion of the mid-February Back-to-School Show began in early December, for example, while the NOPA show, Acco's biggest trade show, comes under consideration six months ahead of opening day.

The initial step is to identify the goals for the show. "The first thing an exhibitor wants to do is to know the audience to which he wants to communicate. Then he must figure out *what* he wants to communicate," explains Fred Kitzing, president of Kitzing Inc., a Chicago-based trade show marketing firm that numbers Acco among its clients. "It sounds basic, doesn't it? Ridiculously simple? So simple that such goal-setting is easily and frequently overlooked."

Many companies set no goals at all for their trade shows, Kitzing points out, attending with only a vague intention to make a good impression for the company and to make or renew some contacts with customers. Others simply want to write as much business as possible on the floor, and often wind up cannibalizing sales that the field staff would have made anyway.

Robert M. Lightfoot III

Down to details: *Once goals for a trade show are set, Kitzing's Michael Pierdiluca (left) and Acco's William Cogdill draw detailed plans.*

Kitzing, who pioneered the concept of trade show marketing more than 20 years ago, operates one of the few full-service trade show consulting agencies in the country. Admore Inc. of Shrewsbury, Mass., and New York City–based Muir Cornelius Moore, an ad agency with a strong trade show marketing division, offer a similarly broad range of advice and service.

At Acco, a Kitzing client since 1979, Carvell usually meets with William S. Cogdill, internal sales manager; Michael Pierdiluca, the Acco account representative for Kitzing; and an Acco national sales manager to set basic strategy for each show. In discussing the upcoming October NOPA show, for example, "we have to decide whether we're introducing new products or expanding our base within a distribution channel," Carvell explains. "Those are our primary reasons for going to shows. Then, taking a look at what we're offering, we ask ourselves, Do we do a theme around a new product in particular or around a whole line?

"Then we basically talk ideas: brainstorm. Is this an order-writing show or a lead-generating show? That shapes what we set up for conference rooms and sales arena.

"For the NOPA show, our planning is very precise," Carvell says. "We sit down with our blueprints and discuss every detail, down to the last ashtray and the placement of the Velcro."

For Acco, a key long-term goal is to increase its penetration of the computer dealer market with its line of data storage files and other computer-related products. Few of the existing retail computer deal-

Einzig Photography

The chief attraction for most companies is the sheer cost-effectiveness of trade show marketing. The average field sales call today may cost as much as $250. A 1981 survey by a trade show industry group put the average cost of a booth contact at just over $68.

ers, estimated at from 4,500 to 10,000, have Acco products in their stores, making them fertile ground for Acco's sales force. "Thus, for Comdex [a major microcomputer trade show], we may set a goal of 300 sales leads and we may set a secondary goal of gathering a couple of thousand names to go on a list for direct mail," Carvell says.

The goals—and the execution—may be vastly different for other companies. A case in point is IBM, which is not an Acco competitor, but which exhibits at a number of the computer shows that Acco has recently begun to enter with its data storage systems.

"They're so big and have so much. They overwhelm. I mean, it looks like it's the IBM show and somebody else showed up," says Carvell. "They never talk price qualification, because their presence in the marketplace is so strong. They may fill out a lead card, but they don't sell so much as they demonstrate. It's a different sort of sales pitch, and you have to recognize that they have different goals from you: that although they might overwhelm, that's their goal, after all, and it isn't yours. So, on that score, you're not competing. Don't even try. And don't feel diminished."

For example, Sierra Manufacturing Co. of Virginia Inc., one of the top makers of wood-burning stoves, had a rather different goal going into the Home Center Show in Dallas in 1983. "We were in an industry that was maturing rapidly," explains Robert Wells, national sales manager for Sierra. "We began to realize that if we wanted to continue to grow, we would have to increase our market share, and the best way to do that would be to move outside the markets that we had traditionally operated in, the alternative energy markets.

"We decided that we wanted to try to reach consumers through home centers," Wells continues, "but we didn't know anything about the industry. We did know that if we just started to study the industry, it could take us years to carry out our research. The trade show seemed to be the quickest, least expensive way to get into that market and develop contacts with the dealers."

Based on the feedback from that show, Sierra Manufacturing was able to develop a new marketing concept, which centered on the production of less expensive wood stoves to be sold to consumers through home centers, Wells says.

Exhibiting companies, no matter what their size, find that trade shows can be especially useful in introducing a new product to the marketplace. The company can count on getting initial reaction from customers—which is especially important if it is a high-technology product, whose life cycle may be measured in months, rather than years. "Fifty percent of what we sell was not available last year," explains LTX's Miller. "There is no faster way to get it to our customers than through trade shows. And our products sell for $400,000 or more. There's no way a customer is going to spend 400 grand without actually seeing the equipment in operation."

Robert M. Lightfoot III

Total effect: *Fred Kitzing lets clients talk out their own ideas about booth design, but the important thing, he says, is to create a selling environment.*

LTX, of course, is not the first electronics company to discover the special advantages that trade shows hold for high-tech marketing. Electronics shows generally have been the fastest-growing segment of the trade show industry over the past few years, according to Martha Wolf, director of marketing communications at Gould Inc. and president of the International Exhibitors Association, the trade group for companies that use trade shows. While attendance and exhibit space dipped during the recession for many of the more established shows, the electronics shows exploded. Comdex, for example, was launched in 1979 as a meeting place for small-computer manufacturers and independent sellers of small systems products. It ballooned from just over 26,000 square feet of exhibits and 4,000 visitors that first year to a staggering 570,000 square feet and more than 83,000 visitors in 1983. Softcon, a show strictly for software, burst upon the scene in February of this year with a whopping 260,000 square feet of exhibit space and about 20,000 attendees.

In fact, the success of the electronics shows has been so startling that at least one city, Dallas, now has plans for an exhibition center for electronics products, and Boston is in the midst of setting one up as well. The centers would be, in effect, permanent trade shows.

While the importance of the challenges

Oscar & Associates

"At a trade show, I can stand up and be counted with the big guys," says the chief executive of a $50-million electronics firm. "I can create an image that is, shall we say, 'anticipatory.' We can, quite simply, look bigger than we are."

facing many electronics companies is magnified because of the dramatic growth of the industries they are in, the challenges are similar to those that all companies must confront Introduction of new products, positioning and repositioning of a company, exploration of new markets, developing and maintaining market share, keeping an eye on the competition, and cementing relationships with distributors are all crucial to the life of any company.

But identifying those goals—the science—is often the easy part. The hard part—the art—is the execution.

□

A brilliantly positioned print advertising campaign may be worthless if it is executed unimaginatively, and the same is true of a trade show marketing effort. If creating an effective print campaign calls for the careful eye of the artist, then fash-

HOW TO WORK THE BOOTH

You're pitching your product at a trade show and you have just completed a brief spiel to a small group of potential customers in your booth. Two members of your audience walk away.

That may be good.

But one of the remaining prospects is really taken by your pitch. He doesn't just hear you out, he lingers, pumping you for details, asking about old products, chatting about business.

That's not so good.

On the trade show floor, familiar selling caveats are out. Limited time, not patience, is the main factor. The goal is to identify potential customers as quickly and conclusively as possible, to eliminate abruptly anyone who is not a prospective buyer, and to capture swiftly, on a lead card, all the information necessary for contacting a likely client once the show ends.

"It's better to sell the next step in a sales cycle than to sell the product," counsels Diane Weintraub, director of marketing and communications at Timeplex Inc. in Woodcliff Lake, N.J., a company that uses trade shows extensively in the marketing of its data communications products. "The idea is to keep the traffic flow going, and not to buttonhole one guy for an hour.

"Assume, for instance, that the attendance analysis we look at before a given show indicates that we can expect 15 customers to pass by our booth every hour. Our sales staff can handle 8 customers an hour. That means they've got to make some quick decisions about who's out, who's in. They've got to qualify and qualify and qualify."

"Qualifying" is the process of determining whether a visitor to the booth is a serious sales prospect or a mere tire-kicker. The quicker the booth staff can qualify prospects, the more effective it is. The more nonprospects they get rid of, the better they are doing.

That approach, of course, goes against the grain of most selling. Thus, many companies that use trade show marketing have found it necessary to untrain their top field sales staffers and retrain them in trade show selling. Infocom Inc., for example, a Cambridge, Mass., software company, had its booth staffers put through a daylong workshop in preparation for their first trade show—the Softcon show in New Orleans this spring.

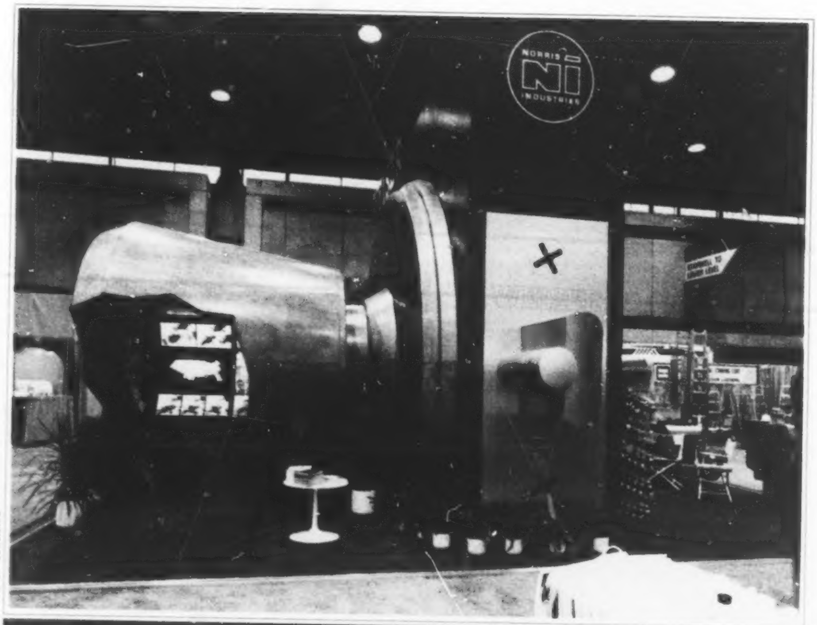
"You have a great booth, a great product, and a great opportunity," Adamore Inc. trade show consultant and executive vice-president Robert Francisco told the 20 Infocom employees. "But all that's mere fluff if you don't sell effectively."

Francisco hammered home the differences between normal sales techniques and trade show selling, outlining the roles that each staff member would play on the floor and detailing, step by step, the method for moving a visitor from early qualification into the booth for further information-gathering, and then briskly but gracefully back to the aisle.

Training salespeople for trade shows is no easy task, says Charyn Ofstie, a Chicago-based trade show consultant who has run dozens of such sessions. "You're up against egos," she explains, "often working with highly skilled salespeople who have to unlearn some instinctive habits.

"The whole point of a trade show is the chance to meet head-on," she says. "We role-play being out there, up front, making eye contact. We define specific actions, dialogue. Otherwise, a sales rep at a trade show is like an actor thrust out on the stage before he's learned his lines."

—S.B.



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To be effective, all the elements of a trade show campaign have to work together. "Designing an exhibit, that ain't no trick," says an advertising agency executive. "But integrating the trade show process, that's the challenge."

ioning a good trade show effort calls for the dramatic flair of an impresario coupled with the skills of a teacher.

"It's like building a house and opening a Broadway show at the same time," says Carvell.

Acco has run up a string of hits at the NOPA show. At each of its past four exhibits Acco has used a different theme—and succeeded, each time, in writing more orders than the previous year. With 1980's Western motif, "we were making an image statement," Carvell says. "We were telling people that we do business all over." The following year's firefighting motif was actually a result of Acco's belt tightening. The recession had begun, and Carvell had decided that he didn't want to spend the money to buy a new booth. So he burned down much of the old one in controlled fashion and used the theme of protection products.

The next year's show followed a series of nationwide sales presentations in which Acco had composed a song-and-dance revue with the title "That's Entertainment!" Carvell melded elements of that program with the NOPA show theme of "Tomorrow's Office Products." And last year's "It's Time to Pro-form" theme was the most successful to date.

"A show has got to be dynamic," says LTX's Miller. "You can't take a shop-window, glass-case approach. You've got to make your points in memorable fashion and you have to make sure they underscore the benefits to the customer.

"It doesn't cost much in extra time and effort to put on a superior trade show presentation. That 10% extra effort will get a 900% difference in results. The point is not to throw money at the project, but to be creative, inventive."

The creative elements, however, have to harmonize with the entire marketing plan. In the hubbub of a trade show, it is a challenge to draw attention to one booth. It is an even bigger challenge to attract the attention of the right group and to present, at the same time, the proper message.

"Designing an exhibit, that ain't no trick," says Muir Cornelius Moore's chairman and chief executive officer Bill Muir. "But integrating the trade show process, that's the challenge."

Fred Kitzing says he often lets a new client go through a sort of catharsis about the booth design, allowing the client to present all of his or her notions about how the booth should look before Kitzing gets down to the serious business of planning. "I like to let them get the booth off their minds, because, in the end, it's only the backdrop," Kitzing says. "The important thing is to create a selling environment."

The central element in most effective trade show programs, Kitzing says, is the face-to-face meeting between the company representative and the visitor. A well-designed exhibit or a memorable slogan

THAT'S SHOW BIZ

The trade show business itself has become a growth industry. Exhibitors spent about $7 billion in 1980, and the Trade Show Bureau estimates that 1983 expenditures were $9 billion. In addition, the number of trade shows doubled between 1974 and 1982, rising from 4,500 to 9,000, according to the bureau.

The following is a list of the top 10 trade shows in 1983:

Rank	Name of show	Exhibit space (sq. ft.)	Attendance	Location
1.	Intl. Summer Consumer Electronics Show	736,000	83,311	Chicago
2.	National Hardware Show	660,000	73,676	Chicago
3.	Intl. Winter Consumer Electronics Show	638,000	78,126	Las Vegas
4.	NHMA/Intl. Housewares Exposition (July)	597,980	15,262 buyers	Chicago
5.	NHMA/Intl. Housewares Exposition (Jan.)	580,213	18,000 buyers	Chicago
6.	COMDEX/Fall	560,200	83,400	Las Vegas
7.	RVIA/Recreational Vehicle Industry Assn. Annual National RV Show	491,126	9,899	Louisville
8.	MHI/Manufactured Housing Institute's Natl. Manufactured Housing Show	465,500	10,000 est.	Louisville
9.	Intl. Marine Trades Exhibit & Convention	445,500	33,000	Chicago
10.	Offshore Technology Conference	431,525	59,986	Houston

Source: *Trade Show Week*

ACCO
Tomorrow's Office

Producing a successful trade show effort calls for the dramatic flair of an impresario, coupled with the skills of a teacher. "It's like buying a house and opening a Broadway show at the same time," says Acco's Carvell, dressed (far left) for opening night.

can convey a message, but hardly better than a print advertisement could. What a print ad can't do is present a product demonstration or provide the introduction to a one-on-one sales pitch. Personal contact is the essence of the trade show's advantage over other marketing media; all the elements of the trade show effort should be coordinated to set the stage for those meetings as efficiently as possible.

"We like to say we're in the communications business, rather than the exhibit business, because this is a highly charged, always active medium," says Charyn Ofstie, a Chicago trade show marketing consultant who spent several years at Kitzing.

Not all of those encounters have to result in sales or sales leads. But at Acco, as at most companies, this goal is usually top priority, and the scheme reflects that.

The less expensive, single-page, black-and-white literature is offered at the front of the booth. The more detailed, four-color literature is kept at the back, Carvell explains. That way, if a visitor seems like a good sales prospect, the salesperson can buy some time by bringing the prospect into the booth to provide more literature. That time is used to elicit, through casual conversation, important information about the prospect: Is the person authorized to make the buying decision? If so, what kind of merchandise is he interested in, and when would a decision be made? This is called "qualifying" the prospect. If the customer is a bit reticent, Acco salespeople sometimes fumble around with the literature in a conscious effort to stretch the conversation and ferret out the information they want.

Then the salesperson's job is to whisk the prospect back out of the booth as quickly as possible, to make room for the next one. The limited span of the trade show forces the booth staff to work quickly and sometimes brusquely, in contrast to the normal patterns of sales staffers. Martha Wolf of the International Exhibitors Association says a booth staffer should be able to decide in 30 seconds whether a potential prospect is worth devoting time to. Often the most important task of the booth personnel is to discard as many nonqualified prospects as possible in order to winnow out the qualified leads. That runs counter to the instincts of many field sales staffers, which makes preshow training an important step in the planning process for many companies (see "How to Work the Booth," page 72).

It is not an easy process, as exhibitors attest. And it is a far cry from the old attitude of trade shows as primarily social affairs.

☐

"You have to pay your dues continuously. It never just happens," says Diane Weintraub, marketing executive for Timeplex, a $100-million data communications equipment maker in Woodcliff Lake, N.J. "The world is not a static place. You have to keep up with its fluctuations."

Timeplex has kept up nicely. Weintraub says the company has gotten back $7 in sales for every dollar spent on trade shows. In recent years that return has increased to $12.

Both Timeplex and Acco seek to generate sales leads at a show, but Acco, in addition, tries to identify the leads well before the trade show begins. "We use a mix of direct mail, trade shows, and field activity in our marketing," Carvell says. "Through direct mail, we want to get people to *show* yes, not just *say* yes. When potential clients arrive at an Acco booth with an Acco ad in hand, they immediately become targets for sales calls. "After a show, we may find ourselves with 350 leads. Those who returned the bingo cards immediately go to our reps. They're hot. Those who didn't use the card, maybe they'll get a call, some more preselling to set up an appointment for our sales reps.

"Getting 5,000 leads at a trade show sounds good, but we couldn't handle it at this point," Carvell adds. "Getting 5,000 and culling it down to 500 good, strong prospects, that's a fruitful trade show in my mind."

Exhibitors aren't always as conscious of the need to follow up on the leads that a trade show can generate. "We actually had a client who packed up his exhibit when the show was over and stored it in our warehouse," says Robert Francisco, executive vice-president of Admore. "When we were checking through the pieces, we found all the lead cards stuffed in the exhibit cabinet. The company hadn't even missed them!"

At Acco, however, not only are leads carefully channeled to the proper field sales office for follow up, but also a computer is used to track each lead internally to see just how valuable the trade show is as a source of potential clients. That is part of the internal selling job that Carvell faces, convincing his sales staff that trade shows provide high-quality leads that turn into sales.

Such an acknowledgement is probably two years away," Carvell admits. "What will really make a difference is when we're able to say that maybe 8 out of 10 leads turned out to be good ones. That's when the sales staff will start coming to us looking for those leads."

When that happens, Carvell plans to be ready. Acco hired a full-time coordinator solely for its trade show efforts, and it plans to exhibit at 16 shows this year, up from 9 in 1983. "But if you don't do them right," Carvell cautions, "you're wasting a lot of money and a lot of opportunity." ☐

BEST AVAILABLE COPY

Michael Bonum

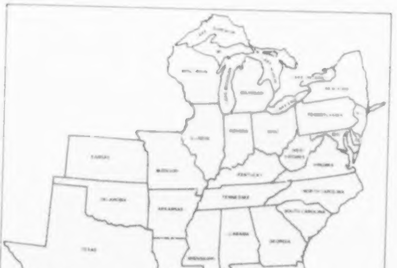
SUGAR BABY

Jimmy Spradley's candy bar has already charmed the South. Can it sweet-talk its way into the national market as well?

By John F. Persinos

James W. Spradley Jr., 28-year-old president of Standard Candy Co., walks in his factory amid brimming hoppers of peanuts and huge vats of caramel, watching a 7,000-gallon tank pour warm chocolate onto clumps of peanuts riding a conveyor belt. The floor is sticky and the atmosphere frenetic as each day the production line churns out more than 150,000 pieces of the company's main product—a round, caloric amalgam of chocolate, peanuts, caramel, and marshmallow with the whimsical name of Goo Goo Cluster.

"When I first got here, this plant was making fewer than 50,000 Goo Goos a day," shouts Spradley, straining to be heard over the din of gurgling chocolate and clanking machinery. "We're still operating at less than 40% capacity, meaning we can meet demand once business *really* starts to take off."



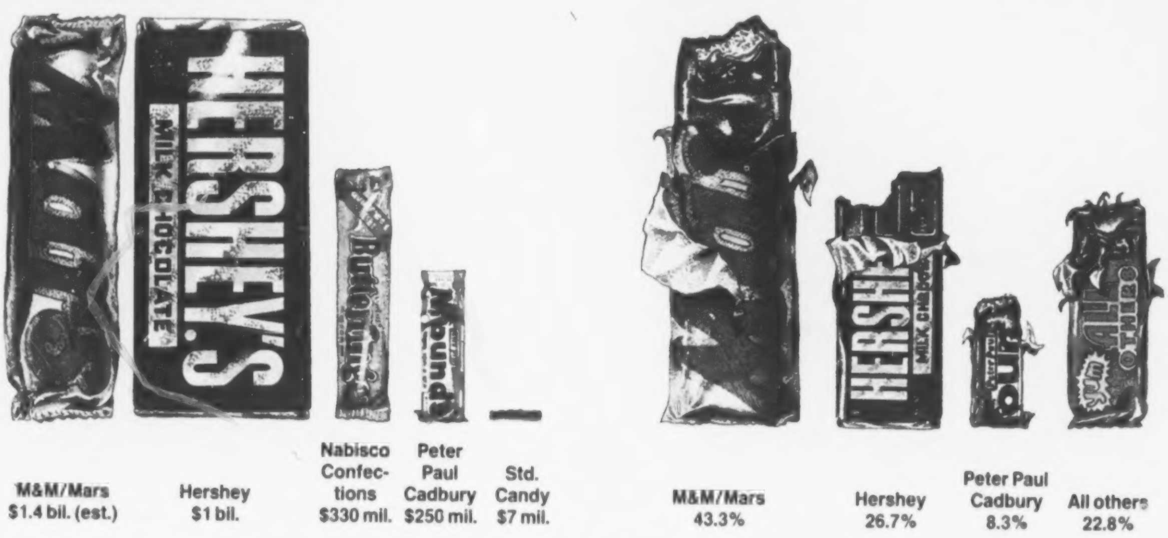
Dan Harvey

Already Spradley has spread the Goo Goo's sales coverage to 23 states (shaded area).

Take off is precisely what Standard Candy, located in Nashville, plans to do. Despite scant cash for advertising and only limited test marketing, Spradley wants to take his southern-based Goo Goo Cluster and sell it all over the country. One day, he dreams, the Goo Goo will be battling with national top-selling brands like Snickers, a rival synthesis of peanuts and chocolate that is America's No. 1 candy bar.

For Standard Candy, with only $7 million in annual sales—and for Spradley,

THE CANDY BUSINESS



Major chocolate bar manufacturers
(total annual revenues, 1983)

An industry dominated by giants, the candy bar business presents formidable obstacles to smaller competitors like Standard Candy. Among the leaders are M&M/Mars, a subsidiary of the nation's largest privately held industrial company, and Hershey Chocolate.

Share of the candy bar market
(wholesale purchasers, 1982)

"All other" candy bars—less than one-quarter of the market—include well-known brands like Butterfinger and Baby Ruth, as well as many lesser-known regional bars. Standard Candy's Goo Goo holds about 5% of the central-Tennessee market, less elsewhere.

who has been in the candy business only two years—it is a heady aspiration. Nationally, candy sales are growing at less than 8% a year, a pace that isn't expected to pick up anytime soon. And although there are hundreds of candy companies in the United States, only two of them account for nearly 70% of the entire candy bar market—M&M/Mars, the candy division of Mars Inc., and Hershey Chocolate Co., the candy subsidiary of Hershey Foods Corp. The twin behemoths—each of which did more than $1 billion worth of business in 1983—manufacture all of the nation's 10 best-selling candy bars and most of the top 20. Yearly sales of Mars's Snickers alone, estimated at more than $300 million, approach the revenues of some *Fortune* 500 companies.

What seems like a quixotic quest, however, must be measured against Standard Candy's two indisputable assets. One is the Goo Goo itself, which enjoys a clientele that is almost cultlike in its devotion. The other is Jimmy Spradley, who is considerably drier behind the ears than either his age or his ambitions might suggest. Put together, they make a combination that may yet elbow one or another of the giants' bars off the retailer's shelf.

Back in 1912, Standard Candy founder Howell H. Campbell invented a candy bar—naming it, so the story runs, after the sounds uttered by his baby son. Since then, the Goo Goo Cluster has been as intertwined with the region of its birth as twanging guitars and misty-blue mountains: Ask a Tennessee good ol' boy to recall his childhood, and Goo Goos are apt to be right up there with hunting and hoedowns in the fond-memory department. Standard has always cultivated this down-home image, mostly by advertising heavily on Nashville's famous *Grand Ole Opry Show*, a country-music spectacle that is heard in about 35 states. "The South's Favorite Candy," the boxes of Goo Goos are labeled.

Until recently, you couldn't buy a Goo Goo more than 200 miles or so from downtown Nashville. But that didn't stop word of the bar or samples of it from trickling into the outside world. Candy aficionado and author Ray Broekel, who consumed two years and over 1,000 candy bars to write *The Great American Candy Bar Book*, announced that the Goo Goo was his all-time favorite. Tourists visiting the Opry—and there are busloads of them every week—tasted the Tennesseans' delight and brought word of it to the folks back home. All told, some $100,000 in annual mail-order business around the world reflects the Goo Goo's mystique. Singers Dinah Shore and Pat Boone, both former Tennessee residents, regularly receive shipments of the bars, as does Hollywood tough-guy James Garner. The company gets as many as 100 letters a week either pleading for Goo Goos or singing their praises.

The Goo Goo has turned up in some other unlikely places as well. In 1982, Bloomingdale's ordered some for its Americana exhibit, as an example of a product indigenous to the South. The exhibit is long gone, but the Goo Goos remain: So far, the store has sold more than $15,000 worth. Recently, too, the bars have become a minor fad in Washington, D.C., endearing themselves to prominent lawmakers like Senate Majority Leader Howard Baker (R-Tenn.), and even, reportedly, to Ronald Reagan himself. Whether the candy has supplanted jelly beans as the favorite snack of the powerful can't be determined for sure. But if its growing trendiness is any indication, Goo Goos could be the hottest Tennessee product to invade the North since Jack Daniel's whiskey.

This possibility is not lost on Jimmy Spradley. Since his candy has already shown such appeal to the jaded palates of New York shoppers, Washington pols, and L.A. glitterati, Spradley reasons it ought to find acceptance throughout the land. "In the next two or three years, it's possible for us to be selling about $5 million worth of Goo Goos in the New York

Illustration by Roger Leyonmark

Advertised heavily on Nashville's *Grand Ole Opry Show* (left), and with a fervently loyal following, including (above, left to right) Senate Majority Leader Howard Baker, actor James Garner, and singer Dinah Shore, the Goo Goo Cluster has an increasing number of fans singing its praises. Standard Candy hopes that word of its product's goodness has begun to travel beyond the South.

market," he says, "and from there, spread to Boston."

Spradley's informal timetable for this coast-to-coast market expansion is five to eight years tops. But although such ambitions are easy to write off as the impossible dreams of youth, Spradley is not your typical 28-year-old CEO. When he began working at Standard Candy in May 1982, the company was coming off a long history of mediocre sales and marketing, and in fact was facing bankruptcy. He has since not only turned the company around, but has also strengthened its distribution channels and tapped additional markets. "Once the company was on the upswing, things got easier," he says with a chuckle. "Turning it around was the tough part."

Spradley wasn't the first to attempt a turnaround. In the early '70s, Howell Campbell III, the founder's son, was getting bored with the candy business, and his own son had no desire to pick up the reins. So Campbell unloaded Standard Candy for $1 million to two Nashville entrepreneurs, James Miller and James Fischer. The company's sales, at roughly $2.5 million, were steady but moribund, and Campbell's lack of enthusiasm was obvious to the new owners. While other candy companies of similar size had shifted at least a decade earlier from direct salespeople to food brokers, for example, Standard Candy still employed a force of about 21 salaried salesmen. Like a tired army of Willy Lomans, they sold the company's products out of the trunks of their cars. Although many had been with the company for more than 40 years, in 1975 then-CEO Miller took the traumatic step of letting them all go. With a new broker-based distribution system in place, sales grew by about 5% a year from 1974 to 1979.

In 1979, the company moved from its antiquated, deteriorating, and grossly inefficient plant in Nashville to a 65,000-square-foot facility on the outskirts of the city. Right about then, however, things began to go wrong. Adapting the new building and moving the operations cost far more than the company had expected, plunging Standard Candy into debt just when interest rates were shooting as high as 21%. In the summer of 1980, a drought blazed across the Sunbelt, devastating the peanut crop and sending the price of peanuts, Goo Goo's second most plentiful ingredient, from 30¢ a pound to $1.50. Then the company foolishly moved to its new facility during the back-to-school season in late summer and early fall, thereby closing down production during the busiest candy-buying months of the year. Standard Candy lost $400,000 in 1980, the biggest loss in its history. It kept losing money in 1981 and 1982.

Enter Jimmy Spradley. In 1982, as the company's nosedive gathered speed, Miller and Fischer came under a great deal of pressure from their bankers to make drastic changes in the company or turn it over to new management. Spradley, with the ink on his 1980 University of Chicago MBA degree scarcely dry, was a manager for a real estate syndicator in Nashville at the time, and learned through the grapevine that Standard Candy might be up for sale. Bored with the work he was doing, and nurturing a long-standing ambition to run a company, he sought help from his father, James Spradley, the former president of Stuckeys Inc., an Atlanta-based roadside-store franchise and large manufacturer of candy.

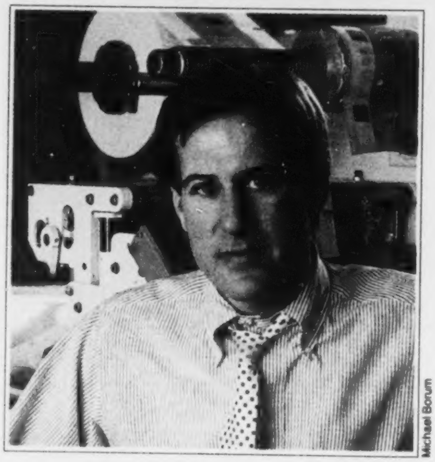
"I kept hearing how Standard Candy was getting into more and more trouble," remembers Jimmy Spradley. "It seemed like a perfect script had been written for me. I went to my father and said, 'Dad, there's a little company in Nashville that's having problems, and I'd like to get involved. Please come down and talk to the owners. Do it for me.' "

Spradley Sr. obligingly played the role of sugar daddy. After several months of negotiations, he bought a 50% interest in the company and ran the business for a few months, with Fischer remaining as a silent partner and Spradley Jr. learning the ropes. About six months later, he gave his son a 10% interest, crowned him president, and went into semiretirement.

Jimmy Spradley immediately focused his energies on marketing. He racked up sales with almost never-ending promotional campaigns. He motivated brokers with incentives such as bonus trips, and he enticed retailers with discounts. He took particular pains to fill distribution gaps in the company's original central Tennessee market, notably by contacting and bringing aboard important regional retailers that had been overlooked. In his first full week of work for the company, for example, Spradley called Wal-Mart Stores Inc., a major chain of discount department stores in the Sunbelt and the Midwest, and convinced its candy buyer that the Goo Goo Cluster was an indispensable item for any store that sold candy and professed to be Southern. Wal-Mart stocked the candy on a trial basis in 31 Nashville-area stores; when it sold well, Spradley discounted the Goo Goos for about three months, prompting Wal-Mart to put it in 123 stores. Wal-Mart now stocks Goo Goo Clusters in all of its 680 stores, encompass-

Photos left to right: courtesy of Standard Candy; Ken Hawkins/Sygma; Tom Stathis/Gamma-Liaison; Tony Korody/Sygma

Standard Candy was in big trouble when Jimmy Spradley first arrived. Not only did he turn the company around, he also strengthened its distribution channels and tapped additional markets. "Once the company was on the upswing," he says, "things got easier. Turning it around was the tough part."



Michael Borum

ing an area from Oklahoma to Georgia.

By the summer of 1983, sales were strong, the price of peanuts had stabilized at about 50¢ a pound, and debt left by Miller and Fischer was being paid off. Then, with recovery apparently assured, Spradley made his first—and so far his only—major blunder. In an impatient desire to boost sales further, he doubled his usual discounts for some customers over a five-week period. Sales soared, but profits plummeted, and the company lost money for about a month before it put an end to the practice. "I had become hung up on sales growth," confesses Spradley, who has since discovered the virtues of moderation in price-cutting. "I've learned there's more to my company's health than fast growth."

Now, with an impressive turnaround under his belt, the young confectioner is preparing to play ball in the national arena. It is, as they say, the big leagues.

Candy bars, which account for about one-half of the U.S. candy industry, reaped over $5 billion in retail sales in 1983. That is enough to provide every man, woman, and child in America with one bar every week. Yet the business may be one of the hardest markets in the world to break into. "Most consumers of candy are guided by tastes they had when they were children," says Kenneth Rosen, president of American Candy and Tobacco Wholesalers Inc. in Landover, Md. "That creates fierce competition for limited shelf space. It's hard to get someone, especially an adult, to pick up a bar unless he recognizes the brand. A company has to throw massive amounts of advertising and promotional resources behind a product before it even gets noticed, and there's still no guarantee. Remember Nabisco's Reggie bar, and what a flop it was?"

Reggie wasn't the only one. Mars's Forever Yours bar, reintroduced with great fanfare in 1978, was a resounding failure. Hershey's Rally and Toffo bars struck out, too. All told, at least 38 bars have disappeared from the market since 1977. One of the few to have made a hit is the Twix bar, a cookie-and-chocolate treat made by Mars; introduced in 1977, Twix has already muscled its way into the top-10 listing. Another is Hershey's Whatchamacallit, brought out in 1979 and now a $50-million brand, in 17th place.

What makes the difference between success and failure? If the giants have any theories, they aren't talking. "We conduct test marketing, hope we've landed on a good formula, and use lots of advertising," explains Bill Deeter, spokesperson for Mars. Hershey's Susan Graham echoes the theme. "Consumer tastes are fickle. If a product looks promising after a market test, we back it up with lots of money and take an educated leap."

Lots of money in this context means lots of money. Hershey's advertising budget is $68 million this year, or almost 10 times Standard Candy's annual *sales*. Spradley's ad budget is $125,000. "To make advertising effective, we'd have to buy a lot of it, and we can only afford a little," says Spradley. "Some day, if our plans work, we'll be forced into using media like television. But that's down the road a bit. For our present purposes, the visibility we have is quite good."

A lot of the Goo Goo's current visibility can be traced to Spradley's shrewd and unconventional promotional tactics. In May 1983, for example, he made a deal with Delta Air Lines to supply Goo Goos as a snack with in-flight meals, bringing the candy bar to the attention of 200,000 travelers every month. Following up on the Bloomingdale's experience, he secured a berth for Goo Goos three months ago in Chicago's Marshall Field & Co. "Stores like Marshall Field and Bloomingdale's were the first to offer once-unknown things like cordless phones and hand-held calculators," says Spradley. "Being on their shelves gets attention, and people start talking about us."

Spradley is careful, however, to complement attention-getting techniques with solid marketing and distribution efforts. The Marshall Field's introduction, for example, was timed to coincide with the Goo Goo's entry into the Chicago market. And he has capitalized on the candy bar's strength below the Mason-Dixon line by carving out toeholds in chains that are prominent both in Tennessee and in other regions. The most recent addition to the fold is The Kroger Co., the nation's second-largest supermarket chain, with stores in southern, central, and southwestern states. The chain agreed to place Goo Goos in about 500 stores in the Tennessee area, where the candy's risk of failure was low. It proved popular, and last March Kroger placed it in all 1,470 stores. In the next 12 months, when Spradley tries to conquer such cities as Denver and Philadelphia, a key stratagem will be to plant Goo Goos in

BRACH'S
Peanut Butter Kisses
SNICKERS
Milky Way

Michael Borum

"Most consumers of candy are guided by tastes they had when they were children," explains one industry expert. "That creates fierce competition for limited shelf space."

Courtesy of Bloomingdale's

The Goo Goo Cluster has turned up in some unlikely places. In 1982, Bloomingdale's ordered some for its Americana exhibit, as an example of a product indigenous to the South. The exhibit is long gone, but the Goo Goos remain: So far, the store has sold over $15,000 worth.

the local stores of large chains that reach to those cities.

Standard Candy has already appointed brokers in several new cities in addition to Chicago, including Kansas City, Oklahoma City, Houston, Baltimore, Pittsburgh, Cleveland, Detroit, and Washington, D.C. The brokers sell to wholesalers, who in turn peddle the company's products to retail outlets like supermarkets, merchandise stores, and mom-and-pop candy stores.

Candy is known as an "impulse" item: The closer a bar is to a consumer's attention, the more likely that his fingers will get itchy and grab it. Big companies like Mars therefore put a great deal of effort into point-of-sale merchandising techniques, providing retailers with such amenities as freestanding bag display fixtures and vertical candy racks, where candy is next to gum and not beneath it. Spradley's distributors, who can't afford to use such techniques very often, instead emphasize discounting and often use just plain cajolery to get Goo Goos near the cash register.

So far, all of these strategies have worked pretty well. Sales have tripled in the past 18 months, suggesting a high repeat factor among Goo Goo initiates. According to a report put out by Distributor Concepts, a tracking service that measures confectionery sales, Goo Goos jumped during Spradley's brief tenure from #136 on its ranking of the country's favorite candy bars to #79 at the end of 1983. "There's nothing else like it on the market," summarizes Spradley. "Once we get people to try it, they're hooked."

To build up his marketing firepower for future guerilla attacks, Spradley has begun raiding the competition's camp. A year ago, for example, he hired E. David Jarrett, a sales manager at Hershey for the previous 12 years. Jarrett is now Standard Candy's senior sales manager, spending most of his time on the road and in the trenches, rallying the company's 28 brokers.

"Introducing a new bar nationally can be very complex, like raising up a child from birth," Jarrett says matter-of-factly. He adds with a hint of disdain that the Goo Goo Cluster's only limitation all these years has been management's lack of vision. "The Goo Goo is not a new bar. It has a history, and it always had the potential to go national. Our brokers have already seen a dramatic difference, from almost no support when Jimmy first got here, to a great deal of it."

Spradley is also reorganizing his sales structure to prepare for the demands of territorial growth. Last January, a second sales manager, Bob Alexander, was hired away from Mars, and a slot for a third manager is in the works. Currently, sales work is shared by Jarrett, Alexander, and, to a lesser extent, Spradley himself. Soon, he hopes, the Goo Goo's territory will be divided into three regions of roughly equal size, each headed by a manager. By delegating most day-to-day tasks, Spradley is preparing to ease out of selling completely.

"When we hit $30 million or so in sales, which is about all our present factory can handle, we'll start thinking about things like bringing aboard more sales managers and building factories in other regions," says Jarrett. "In the long run, the sky is the limit."

Spradley has not confined his innovations to marketing alone. One of his first moves was the introduction of a new product, the Goo Goo Cluster Supreme, a cluster loaded with pecans instead of peanuts. He says the Supreme has been "ecstatically received," and already accounts for 20% of the company's chocolate sales. To circulate the Goo Goo name even more, he prompted an ice cream company, Fantasy Flavors Inc. in Wheaton, Ill., to devise a mixture called Goo Goo Cluster Ice Cream. Fantasy Flavors has been selling the ice cream's ingredients since March 1983, in return for a nominal licensing fee to Standard Candy.

"It's the fastest-growing new flavor our company has ever introduced," says Bob Anderson, Fantasy Flavors's marketing director, enthusiastically. The ice cream, already picked up by 47 ice cream manufacturers and dairies throughout the United States, has been such a hit that Standard Candy and Fantasy Flavors came out last February with the Goo Goo Cluster Ice Cream Bar, a gooey combination that some observers think will benefit dentists as much as it will Spradley. "Getting the name out in any manner is what counts," says Spradley. "I mean, let's face it: 'Goo Goo' is a dumb-sounding name, but it sells the candy. No one ever forgets it."

Standing in his office, not far from the ceaseless bustle of his factory, Spradley dramatically sweeps his hand across a wall map of the United States. "Once we consolidate the areas we're already in," he says, "we'll continue to slowly spread sales coverage in overlapping circles." He pauses, then, with cheerful certitude, declares, "We can be a major candy company someday."

Perhaps. But for now, the real issue is whether Spradley's scheme can spark a nationwide mastication of Goo Goos, or whether the clusters rolling off his production line are destined to stay as provincial as grits. "Mars and Hershey spend millions of dollars on promotional work and advertising when introducing a new bar," says Lisbeth Echeandia, executive vice-president of American Consulting Corp. in Orlando. "But making it work Standard Candy's way is possible. I do know that the Goo Goo has a lot of Southern appeal. What I don't know is whether that Grand Ole Opry stuff will wash with New Yorkers." ☐

INC. Cover Story

THE INC. 100

1984's fastest-growing small public companies

The year 1984 marks a time of dramatic change in the INC. 100. Nineteen eighty-three was a record year for new issues, with 888 initial public offerings generating $12.6 billion, and this year's INC. 100, our annual ranking of the fastest-growing public companies in America, reflects this. Ten years ago, 3 out of 4 companies on this year's list didn't even exist. Five years ago, most were still in the start-up stage—small, struggling, and privately held. Today, they are the pacesetters of American business; as a group, this year's 100—including 43 companies that went public during 1983—is the fastest-growing in the six-year history of the list. They are also the youngest, the smallest, the leanest, the most productive—and the least profitable.

Unchanged, however, is the spirit of risk-taking and adventure that lies behind each of these companies. James L. Jaeger, chief executive officer of Cincinnati Microwave Inc. (#33), was an electrical engineer who was intrigued by the sales figures for the Fuzzbuster, a car-mounted radar detector. When he bought one and took it apart in his garage, he decided he could do better. Last year his business, long since out of the garage stage, grossed $57.1 million, with a five-year growth rate of 2,644%. Walter A. Forbes was a restless consultant who got the idea for his electronic shopping service in a conversation with some Harvard Business School professors—then built Comp-U-Card International Inc. (#87) into a $4.2-million business with a five-year growth rate of 919%. Parker Petit's business began in tragedy—the 1970 loss of his son to sudden infant-death syndrome. To spare others that pain, he invented the home monitoring devices that helped lead Healthdyne Inc. (#5) to 1983 sales of $134 million and a staggering 10,336% five-year growth rate.

But fast growth is the sine qua non of membership on the INC. 100. Led by Endevco Inc. (#1), a Dallas energy company, and anchored by Lane Telecommunications Inc. (#100), a Houston maker of microprocessor-based terminal systems, the 100 companies are ranked according to their percentage increase in sales, based on 1979 and 1983 fiscal year results. Over that five-year period, sales of the 100 companies soared by 2,030%, a compound annual growth rate of 115%. Five years ago, the 100 companies averaged $2.1 million in sales. None had even reached $16 million in revenues, and only 4 topped $10 million. Today, the INC. 100's average volume is $44.6 million, with 43 of the companies surpassing the $25-million mark. All but 2 of the 100 registered at least a ninefold increase in sales during the base period.

This remarkable growth rate marks a new historical high for the INC. 100. Last year the average growth for members of the list was 1,177%; during the first five years of the INC. 100, the growth rate has averaged 973%. Last year's cutoff point was 500% growth; this year, the cutoff mark was 783%, a figure that would have disqualified some 33 members of last year's list. In 1983 alone the INC. 100 chalked up a vigorous 67% sales increase, far surpassing the 4% sales growth of the "Corporate Giants of 1983" as recently reported in *Business Week* magazine.

As always, the ranking represents a diverse range of manufacturing, service, and energy-related industries. Computer and computer-related product companies continue to dominate the list, up from 17 representatives last year to 21 this year. The number of data processing and software companies increased from 8 last year to 13 this year. The number of health-care providers and medical-equipment suppliers grew from 20 to 24, while the number of energy companies fell from 11 on last year's list to 7. Twenty-seven alumni from last year were able to earn places on this year's list, an historical low (see "Whatever Happened to the Class of '83?" page 158).

The members of this year's list are substantially younger than

Photograph by Walter Bibikow

in previous years, largely because of 1983's rush to go public. On average, the 1984 INC. 100 companies have been in business less than 10 years; in past years the average has been more than 12 years. In 79 of the companies the original founder still serves as CEO, compared with the 76 founder/CEOs on last year's list. Founders hold an average of 20% of the equity, compared with 21% last year.

Not only are the 100 companies younger, they are also significantly smaller than in past years. The average volume of 1984's members is $44.6 million, compared with last year's average of $53.3 million and the historical average over the first five years of the ranking of $45.9 million. By aggressively combining internal growth and new ventures with a series of acquisitions in the piggyback trailer, trucking, and offshore marine services area, BRAE Corp. (#11), which topped last year's growth list, tops this year's sales list, with total sales of $322.5 million. Tandon Corp. (#20), a four-year veteran of the INC. 100, is number two in total sales, with a volume of $303.4 million. The Home Depot Inc. (#26), a string of retail do-it-yourself home supermarkets, has the highest total sales of any newcomer to the list, with a volume of $256.1 million (see "New Faces of 1984").

TOP 10 PERFORMERS 1983 PRODUCTIVITY ($000)*

Company (INC. 100 rank)	Sales per employee
Ultimate(3)	$594.5
Electro-Kinetic Systems (68)	500.0
Centuri (39)	466.7
Jeffrey Martin (75)	464.4
Pope, Evans & Robbins (55)	460.2
Teleconcepts (84)	459.7
BGS Systems (71)	387.5
U.S. Health Care Systems (91)	357.0
Independence Health Plan(7)	345.7
Polymeric Resources (86)	320.1

**Excludes capital-intensive energy developers and companies whose primary business is leasing or real estate*

1983 SALES LEADERS ($000)

Company (INC. 100 rank)	Sales
BRAE (11)	$322,479
Tandon (20)	303,369
Home Depot (26)	256,100
Pope, Evans & Robbins (55)	184,065
TeleVideo Systems (8)	168,718
Nutri/System (78)	167,892
Diasonics (27)	166,800
Pizza Time Theatre (17)	165,500
AGS Computers (82)	145,911
Centuri (39)	140,000

INC. 100 PROFILE

Number of companies by industry	
Manufacturing	51
Services	42
Mining (including oil and gas)	7
Total sales 1983 (million)	$4,457
Change (1979–83)	+2030.38%
Change (1982–83)	+66.94%
Total net income 1983 (million)	$173.2
Total net income 1979 (million)	($.793)
Median sales 1983 (million)	$20.22
Median sales 1979 (million)	$0.78
Compound annual sales growth rate (1979–83)	
Total sales	114.84%
Range	72.38%–357.40%
Median	100.89%
Net income as percentage of sales (1983)	
Range	loss to 0.48%–41.29%
Median	5.70%
No. acquiring other companies (1979–83)	45
No. incorporated since 1974	77
Total no. employees	
1983	50,578
1979	5,410
Change 1979–83	834.90%

LEADERS IN EMPLOYEE GROWTH

Company (INC. 100 rank)	1979 empl.	1983 empl.	% growth
Servamatic Solar (18)	3	900	29,900
Applied Circuit (12)	1	162	16,100
Consul (6)	40	3,600	8,900
TeleVideo Sys. (8)	11	867	7,782
BRAE (11)	19	1,208	6,258
ComputerCraft (14)	9	356	3,856
Info. Resources (15)	12	430	3,483
Emulex (4)	12	407	3,292
Forum Group (98)	120	4,000	3,233
HCW Oil & Gas (36)	4	128	3,100

Smaller in sales volume, the 1984 INC. 100 are also leaner in personnel, employing an average of 506 workers each, the lowest figure in the six-year history of the list. Employment on last year's list averaged 683 workers per company, while the historical average is 699. At the same time, however, the 1984 INC. 100 companies have been responsible for generating more new jobs than members of any previous class. Last year alone, the number of employees in the group rose 52%, while over the past five years the 100 have recorded a whopping increase of 835%, a particularly significant figure compared with the 10.5% *decrease* registered by the top 500 industrials. Topping the list in employee growth are two companies new to the 100, Servamatic Solar Systems Inc. (#18) and Applied Circuit Technology Inc. (#12), with gains of 29,900% and 16,100%, respectively. Last year's number one in employee growth, Consul Corp. (#6), ranks third this year, adding another 1,400 employees in 1983 alone.

The 1984 INC. 100 reached an historical high in productivity as well. Using sales per employee as a yardstick, this year's 100 companies averaged $88,116, up from $78,069 last year, and a five-year historical average of $67,878. Here, too, a comparison between members of the *Fortune 500* and the INC. 100 is instructive. With $138,600 in sales per worker, for example, Kaypro Corp. (#42) rang up 47% more sales per employee last year than IBM Corp. Altos Computer Systems (#28) was even more productive, generating almost twice as many sales dollars per worker as the computer giant. Compared with McDonald's Corp., Pizza Time Theatre Inc. (#17) pumps out nine times as much volume per employee. And in the game business, Centuri Inc. (#39) beats Bally Manufacturing Corp. fourfold.

While the majority of the INC. 100 companies expanded internally during the 1979–83 period, acquisitions played a key role in the growth of 45 others, including Crime Control Inc. (#58) and Healthdyne, two members of last year's list that have successfully followed a clearly defined acquisition strategy. Healthdyne's takeover fever began with the acquisition of a series of small retail dealers to provide distribution channels for its home health

TOP 10 PERFORMERS: 1983 PROFITABILITY

Company (INC. 100 rank)	Net income as % of sales
HCW Oil & Gas (36)	41.29
Phoenix American (73)	22.91
Wedtech (52)	18.52
Emulex (4)	18.12
C. P. Rehab (69)	17.95
Info. Resources (15)	17.55
Cincinnati Microwave (33)	17.54
Kaypro (42)	17.13
Nautilus Enviromedical (89)	17.00
Quality Micro Systems (38)	16.99

WHERE THE INC. 100 ARE BASED: TOP STATES

State	1984	1983
California	27	20
Massachusetts	8	3
New Jersey	8	5
Texas	8	10
Colorado	7	5
New York	5	11
Connecticut	4	3
Georgia	4	2
Minnesota	4	7
Indiana	3	2
Maryland	3	0
Pennsylvania	3	4

care equipment; then, last year, the $132.7-million company swallowed Narco Scientific Inc., an $80-million high-technology hospital systems manufacturer that helped swell the parent's growth rate to 10,336%. "Doctors prescribe the equipment the patient is to use at home," CEO Petit explains. "If you want to see home-care products, you'd better get into the hospital first."

Crime Control's acquisition strategy has been based on expanding its markets geographically, rather than by new-product introduction. "We target a region in terms of the growth of its crime rate," director of investor and public relations John Gibbs explains. Since 1980, the Indianapolis-based company has bought 16 smaller security companies based in Houston, southeast Florida, and California, by melding the companies to achieve economies of scale, computerizing heavily, and upgrading the technology the company has achieved growth of 1,305%.

Analysis above the bottom line reveals strong commitment to research and development among the INC. 100. Among the 63 companies for which R&D figures are available, development expenditures topped $200 million last year, up from $8.6 million five years ago. The hefty sum represents 7.5% of sales. Heading the list of the biggest R&D spenders are Genentech (#62), Tandon, Diasonics (#27), and ISC Systems (#40). Valex Petroleum Inc. (#93) tops the list of R&D spenders when measured as a percent of sales, with 129% spent drilling in the Ventura Basin north of Los Angeles, and in Kansas. "Now is a good time to be exploring for new gas deposits because of the decreased drilling costs," Valex president Sigmund Rosenfeld explains. At least 16 of the companies spent more than 10% of their sales on R&D, including two bio-tech companies: Genentech, which spent 78%, and Genex Corp. (#23), which spent 54%.

The members of this year's list are much younger than in previous years, largely because of 1983's rush to go public.

In terms of earnings, the members of 1984's INC. 100 show a far more ragged bottom line than their predecessors. As a group, the 100 companies were unprofitable five years ago, with 43 indicating red ink on their P&Ls. That has improved dramatically, although at the end of 1983, 19 were still wrestling with deficits. Two out of 3 companies posted gains in earnings last year, raising their total net profit to a modest 3.9% of sales, with a median of 5.7%, significantly lower than last year's median of 9.6%. Disregarding the 19 companies with losses, however, net income

WHATEVER HAPPENED TO THE CLASS OF '83?

Led by Healthdyne (#5 this year), Consul (#6), and BRAE (#11), 27 of the 1983 INC. 100 companies graduated to the 1984 listing. Of those, 4 moved up in standing. The other 23 slipped to lower rankings but remain members of an elite club where sales growth over the past five years exceeding 1,400% is more the rule than the exception.

What of the 73 companies that failed to qualify this year? Most of them—40 to be exact—continue to achieve spectacular growth, but at less than the blistering pace of 1984's top 100. Twenty-seven of the companies, in fact, rank among the second 100 fastest-growing publicly held companies. They range from Swanton Corp. (#101), with a five-year sales gain of 778%, to Computer Associates International Inc. (#200), with a 395% jump. In between are other outstanding performers such as C3, CACI, Cullinet Software, M.D.C., and Ventrex Laboratories—all of whom have more than quintupled their sales in the past five years.

Eighteen other companies saw sales falter in 1983 and therefore were disqualified. Not surprisingly, they include six companies in the petroleum industry. Hardest hit were Hadson Petroleum Corp., whose sales plunged 52% last year to $21.0 million, and Monument Energy Services Inc., an oil-field services outfit whose sales dropped more than 48%, to $20.5 million. Faring best in the sextet of energy companies was Gulf Energy Corp., which held its sales decline to 12%.

Among others experiencing setbacks last year were Intertec Data Systems Corp. and Machine Technology Inc., which recorded sales decreases of 29% and 27%, respectively. Battling lesser downturns, with drops of 6% to 12%, were Sykes Datatronics, Vector Graphic, Lexidata, and Cetus.

Eleven companies from '83's list did not meet another criterion: sales of more than $100,000 but less than $25 million in the base year 1979. That includes Nelson Research & Development Co., a pharmaceutical producer whose '79 sales were only $32,000 (down from $130,000 in '78). In 1983, however, the company's volume exceeded $3.3 million, more than doubling the previous year. Ten others had passed the $25-million mark by 1979—Apple Computer, CPT, Cray Research, Dysan, Intergraph, Liz Claiborne, North American Watch, Pengo Industries, Reeves Communications, and Tandem Computers. While all but Pengo Industries Inc. have at least tripled their sales since 1979, the all-time star is clearly Apple Computer Inc. The company not only chalked up a sales gain of 1,953% in the past five years, it also soared from less than $1 million to almost $1 billion in seven years.

Two companies on last year's roster have been acquired by larger companies. Teleco Oilfield Services Inc., a $51.6-million offshore drilling specialist, was recently acquired by Sonat Inc., a $2.7-billion energy giant formerly known as Southern Natural Resources. And last October, Godfather's Pizza Inc. encountered a stock offer it couldn't refuse. In a transaction valued at $308 million, the pizza chain linked up with Chart House Inc., a $382-million operator/franchisor of steak, Mexican, and Burger King restaurants.

Finally, the Class of '83 is not without casualties. From the position of #18 on last year's list, Chemical Investors Inc. plunged into bankruptcy last June. Once a high flier in the industrial-tape business, following a series of buyouts that included Borden Inc.'s Mystik Tape division, Chemical Investors became mired in mismanagement that led to charges of inventory thefts, improper accounting, and loan violations. More recent is the collapse of Xonics Inc. (#99 last year), a $119-million maker of medical diagnostic equipment. Although the company had been carrying losses for five years, it had counted on new X-ray and tomography units to resuscitate its bottom line. However, run-ins with the Securities and Exchange Commission, a lawsuit over accounting methods, plus overwhelming development costs and interest charges finally prompted management to pull the plug and seek protection under Chapter 11.

was a far more respectable 7.4% of sales.

Overall, 25 of the companies more than doubled their profits from 1982 to '83, while 9 climbed into the black. Among the more spectacular performances were those recorded by Kaypro, which soared out of the red and into the black by $12.9 million; Consul, which rang up a 2,773% increase in earnings; and Byers Communications Systems (#74), with a 1,834% gain in the profit column. Bolstered by 10 companies that more than doubled or tripled their profits last year, those companies in the health-care industry turned in the most favorable group performance.

The 1984 INC. 100 companies have generated more new jobs than members of any previous class.

Diasonics Inc. (#27), the California-based diagnostic imaging systems company, was the big loser, recording nearly $65 million in red ink on sales of $166.8 million in fiscal 1983. "We saw maybe five years of disasters compacted into one," vice-president of investor relations Timothy Craig explains. "It was Murphy's Law from beginning to end." Projection of market expansion turned out to be wildly optimistic throughout the industry, causing widespread price-cutting and eventually forcing the company to lay off staff and write down assets.

Buttressed by newly infused equity, 2 out of 3 INC. 100 companies boast current ratios of 2.0 or better. The average current ratio for the 100 is 3.9, with only 4 companies whose current liabilities exceed their current assets, including Nautilus Enviromedical Systems (#89), Movie Systems (#96), Terrano (#53), and Comp-U-Card International. Of that quartet, only Nautilus closed 1983 in the black, although Comp-U-Card International CEO Walter Forbes sees an improvement shortly down the road (see "New Faces of 1984," page 174).

Pegging the INC. 100's return on equity is difficult, if not impossible. Small growth companies in general are highly leveraged, and the companies that form the INC. 100 are no exception. Substantial changes in equity due to new stock issues, coupled with the idiosyncracies of calculating return ratios, further distort the figures. By INC. estimates, however, the 1983 return on equity among the 81 companies showing aftertax profit ranges from 1.34% (Genentech) to 37.9% (AGS Computers Inc. [#82]), with a median of 13.8%. "I often say that we have such a high return on equity because we have such an understated balance sheet," jokes AGS Computers CEO Lawrence Schoenberg. AGS, Schoenberg explains, has focused directly on return-on-equity (ROE) since the company initiated its acquisition strategy more than three years ago, eventually buying up 7 companies without increasing debt to fund expansion; the goal, he says, is to maintain ROE at 1.5 to 2 times the industry average, "which is not going to be easy."

Overall, 25 of the companies more than doubled their profits between 1982 and '83; 9 climbed into the black.

As with any ranking of elite companies, the 1984 INC. 100 list raises curiosity about the companies that finished as runners-up. Swanton Corp., a $54-million diversified financial services firm with widespread coal operations, emerged as #101. The New York City company, which chalked up a five-year sales gain of 778%, had earned slots on three previous INC. 100 rosters. Among other runners-up are at least 100 companies that have more than quadrupled or quintupled their sales since 1979. They include 27 members of last year's INC. 100 (see "Whatever Happened to the Class of '83?") and such fast-track performers as Robotic Vision Systems, KMW Systems, Micro Bio-Medics, and Kroy—all of whom have increased their sales more than 700% in the past five years.

—Bradford W. Ketchum Jr.

INC. 100 INDEX

Company (rank)

AGS Computers (82)
AMCable TV Industries (94)
ASK Computer Systems (57)
Altos Computer Systems (28)
Amber Resources (92)
Andover Controls (88)
Andros Analyzers (79)
Applied Circuit Technology (12)
Atlantic Southeast Airlines (10)
Avant-Garde Computing (72)
BGS Systems (71)
BRAE (11)
BSN (65)
Biomet (63)
Biosearch Medical Products (60)
Byers Communications Systems (74)
C. P. Rehab (69)
Centuri (39)
Chemfix Technologies (90)
Cincinnati Microwave (33)
Ciprico (37)
Cornair (59)
Comp-U-Card International (87)
Compucare (80)
ComputerCraft (14)

Company (rank)

Concept Development (51)
Consul (6)
Continental Health Affiliates (70)
Crime Control (58)
Cybermedic (76)
Data Switch (34)
Datasouth Computer (47)
Diasonics (27)
Distributed Logic (48)
Doran Energy (56)
Eaton Financial (95)
Electro-Biology (30)
Electro-Kinetic Systems (68)
Emulex (4)
Endevco (1)
Fibronics (45)
Forum Group (98)
Genentech (62)
Genex (23)
HCW Oil & Gas (36)
Harris & Paulson (67)
Health Extension Services (99)
Healthdyne (5)
Helionetics (64)
Home Depot (26)

Company (rank)

Home Health Care of America (25)
ISC Systems (40)
Independence Health Plan (7)
Information Resources (15)
Interand (66)
JP Industries (50)
Jeffrey Martin (75)
Kaypro (42)
Kloss Video (31)
Lane Telecommunications (100)
Lifeline Systems (24)
Margaux Controls (21)
Masstor Systems (41)
Medical Graphics (49)
Micom Systems (61)
Movie Systems (96)
NBI (97)
Nautilus Enviromedical Systems (89)
Novan Energy (32)
Nugget (43)
Nutri/System (78)
Onyx-IMI (16)
Phoenix American (73)
Pizza Time Theatre (17)
Polymeric Resources (86)

Company (rank)

Pope, Evans & Robbins (55)
Protocol Computers (13)
Psych Systems (19)
Publishers Equipment (29)
Quality Micro Systems (38)
Rexon (22)
Scientific Laboratories (77)
Scientific Leasing (83)
Servamatic Solar Systems (18)
Standun (85)
TVI Energy (46)
Tandon (20)
TeleVideo Systems (8)
Teleconcepts (84)
Tender Loving Care (54)
Terrano (53)
Texas Energies (81)
Ultimate (3)
United States Health Care Syst. (91)
Valex Petroleum (93)
Video Connection of America (44)
Wedtech (52)
Yankee Oil & Gas (2)
Zitel (9)
ZyMOS (35)

100

Rank '84	Rank '83	Company	Sales growth (1979-83) Percent increase	Sales growth (1979-83) Compound annual rate	Sales ($000) '83	Sales ($000) (rank)	Sales ($000) '79
1	☐	**Endevco** (Dallas)	43,670%	357%	$92,355	(14)	$211
2	☐	**Yankee Oil & Gas** (Cohasset, MA)	29,915	316	82,241	(17)	274
3	☐	**Ultimate** (Clark, NJ)	14,762	249	39,236	(30)	264
4	☐	**Emulex** (Costa Mesa, CA)	11,874	231	31,012	(39)	259
5	24	**Healthdyne** (Marietta, GA)	10,336	220	134,000[1]	(11)	1,284
6	17	**Consul** (Minneapolis)	9,643	214	32,443	(37)	333
7	☐	**Independence Health Plan** (Southfield, MI)	7,583	196	36,649	(32)	477
8	☐	**TeleVideo Systems** (Sunnyvale, CA)	7,375	194	168,718	(5)	2,257
9	☐	**Zitel** (San Jose, CA)	7,115	191	11,039	(64)	153
10	☐	**Atlantic Southeast Airlines** (College Park, GA)	6,696	187	23,785	(45)	350
11	1	**BRAE** (San Francisco)	6,557	186	322,479	(1)	4,844
12	☐	**Applied Circuit Technology** (Anaheim, CA)	6093	181	14,924	(58)	241
13	☐	**Protocol Computers** (Woodland Hills, CA)	5,542	174	11,002	(65)	195
14	☐	**ComputerCraft** (Houston)	5,458	173	45,966	(26)	827
15	☐	**Information Resources** (Chicago)	5,322	171	21,093	(47)	389
16	☐	**Onyx-IMI** (Cupertino, CA)	5,316	171	74,200[1]	(21)	1,370
17	3	**Pizza Time Theatre** (Sunnyvale CA)	5,298	171	165,500[2]	(8)	3,066
18	☐	**Servamatic Solar Systems** (Concord, CA)	4,564	161	31,200	(38)	669
19	☐	**Psych Systems** (Baltimore)	4,522	161	5,500[1]	(83)	119
20	12	**Tandon** (Chatsworth, CA)	4,521	161	303,369	(2)	6,565
21	☐	**Margaux Controls** (San Jose, CA)	4,377	159	20,506	(48)	458
22	☐	**Rexon** (Culver City, CA)	4,259	157	13,251	(62)	304
23	☐	**Genex** (Rockville, MD)	4,253	157	11,100	(63)	255
24	☐	**Lifeline Systems** (Waltham, MA)	4,205	156	9,644	(73)	224
25	☐	**Home Health Care of America** (Newport Beach, CA)	3,648	147	38,983	(31)	1,040
26	☐	**Home Depot** (Atlanta)	3,546	146	256,100	(3)	7,025
27	☐	**Diasonics** (Milpitas, CA)	3,306	142	166,800	(7)	4,897
28	2	**Altos Computer Systems** (San Jose, CA)	3,109	138	74,587	(20)	2,324
29	☐	**Publishers Equipment** (Carrollton, TX)	2,833	133	22,000[1]	(46)	750
30	7	**Electro-Biology** (Fairfield, NJ)	2,810	132	26,600	(42)	914
31	☐	**Kloss Video** (Cambridge, MA)	2,686	130	20,396	(49)	732
32	☐	**Novan Energy** (Boulder, CO)	2,672	129	9,451	(74)	341
33	☐	**Cincinnati Microwave** (Cincinnati)	2,644	129	57,106	(23)	2,081
34	25	**Data Switch** (Norwalk, CT)	2,610	128	36,199	(33)	1,336
35	☐	**ZyMOS** (Sunnyvale, CA)	2,436	124	8,926	(75)	352
36	☐	**HCW Oil & Gas** (Boston)	2,381	123	10,793	(66)	435
37	☐	**Ciprico** (Plymouth, MN)	2,373	123	3,586	(95)	145
38	☐	**Quality Micro Systems** (Mobile, AL)	2,289	121	14,572	(59)	610
39	☐	**Centuri** (Hialeah, FL)	2,135	117	140,000[1]	(10)	6,263
40	4	**ISC Systems** (Spokane, WA)	2,017	114	79,800	(18)	3,770
41	☐	**Masstor Systems** (Santa Clara, CA)	1,999	114	20,170	(51)	961
42	☐	**Kaypro** (Solana Beach, CA)	1,870	111	75,253	(19)	3,819
43	33	**Nugget** (Bloomington, MN)	1,798	109	9,719	(72)	512
44	☐	**Video Connection of America** (Malibu, CA)	1,740	107	1,950	(98)	106
45	☐	**Fibronics** (Hyannis, MA)	1,702	106	4,650[1]	(86)	258
46	☐	**TVI Energy** (Beltsville, MD)	1,691	106	3,116[1]	(97)	174
47	☐	**Datasouth Computer** (Charlotte, NC)	1,670	105	17,700	(54)	1,000
48	☐	**Distributed Logic** (Garden Grove, CA)	1,655	105	10,248	(69)	584
49	23	**Medical Graphics** (St. Paul, MN)	1,640	104	4,680	(85)	269
50	☐	**JP Industries** (Ann Arbor, MI)	1,582	102	47,469	(24)	2,823

[1] Estimate (12/31 closing figure unavailable at press time), [2] nine-month figure; [3] 1982 figure, 12/31 figure unavailable at press time

Net income ($000) '83	Net income ($000) '79	Equity '83	No. of employees '83	(rank)	No. of employees '79	Acquisitions '79-'83	Date inc.	Business description
$1,553	($40)	$9,287[1]	50	(84)	4	0	1977	Oil & gas prod., expl., process., transport
5,357	51	18,882	120	(66)	5	3	1977	Oil & gas drilling, svc., sales, transport
4,614	31	19,789	66	(81)	3	1	1979	Mfr. minicomputer hardware & software
5,619	25	29,022	407	(28)	12	0	1979	Mfr. computer peripherals
10,000[1]	142	140,000	2,000	(7)	200	13	1970	Mfr. electronic medical equip. & devices
1,149	(148)	23,991	3,600	(2)	40	3	1978	Develops/operates Mexican restaurants
3,650	(324)	12,923	106	(69)	10	0	1978	Health maintenance, medical centers
22,398	197	138,862	867	(17)	11	0	1976	Mfr. video display terminals for non-IBM
1,263	(161)	1,988	112	(67)	13	0	1979	Mfr. semiconductor memory systs.
1,803	(259)	12,907	333	(36)	19	1	1979	Regional airline
3,960	1,073	59,080	1,208	(11)	19	8	1977	Leases/manages transportation equip.
2,256	(3)	14,053	162	(56)	1	1	1977	Mfr. testing equip. for hard disk drives
1,505	2	10,342	80	(77)	4	0	1976	Mfr. microprocess.-based protocol conversion prods.
221	(10)	1,887	356	(33)	9	4	1977	Microcomputer systs.
3,702	(361)	26,649	430	(27)	12	0	1977	Market research computer systs.
3,700	(1,647)	31,800	800	(18)	110	1	1977	Mfr. rigid disk drives & computers
(5,974)	(1,324)	49,972[2]	940	(14)	33	2	1978	Franchisor family entertainment restaurants
2,140	2	3,380	900	(16)	3	1	1973	Mfr. residential solar heating units
(1,000)[1]	(49)	3,362[3]	48	(85)	4	0	1977	Mfr. psych. testing & computerized test systs.
23,658	161	212,026	3,300	(3)	219	0	1976	Mfr. computer disk drives
1,368	(465)	9,823	229	(47)	38	2	1979	Mfr. computerized bldg. management systs.
(703)	(1,418)	10,877	133	(60)	70	0	1978	Mfr. small business computer systs. & peripherals
(5,400)	(292)	37,900	230	(46)	19	0	1977	Mfr. recombinant DNA technology
348	(348)	9,940	175	(54)	10	0	1974	Mfr. hospital-provided home emergency response
4,483	(212)	50,458	461	(24)	25	1	1979	At-home medical therapies
9,500[1]	1,445	61,873[2]	2750	(6)	500	0	1978	Home improvement centers
(64,800)	(540)	107,700	1900	(8)	190	7	1978	Mfr. diagnostic imaging systs.
7,921	236	80,376	400	(30)	14	0	1977	Mfr. multiuser microcomputers
(400)	2	6,888	185	(51)	30	3	1979	Mfr. printing presses
3,158	(2,371)	17,140	265	(42)	40	0	1975	Mfr. medical equip.
1,003	(817)	8,300	350	(35)	75	1	1977	Mfr. high-performance projection TV systs.
102	(28)	2,588	125	(65)	8	1	1978	Mfr. solar water-heating appliances, components
10,015	282	9,084	200	(49)	75	0	1978	Mfr. radar warning receivers
6,078	56	43,749	362	(32)	20	0	1977	Mfr. data processing control systs.
(8,151)	36	27,976	252	(44)	9	0	1978	Mfr. integrated circuits
4,456	304	14,006	128	(63)	4	0	1975	Oil & gas partnerships
596	24	7,281	34	(90)	4	0	1978	Mfr. computer parts
2,476	76	16,826	199	(50)	18	0	1977	Mfr. intelligent graphics processors
(572)[2]	(692)	3,323[3]	300	(38)	52	1	1968	Mfr. video games
3,966	366	48,072	1392	(10)	67	0	1977	Mfr. microprocessor-based terminal systs.
(8,777)	(1,391)	48,442	288	(39)	50	0	1976	On-line data systs.
12,888	(32)	39,899	543	(23)	73	0	1953	Mfr. portable microcomputers
(6,778)	(59)	6,271	14	(99)	5	1	1976	Oil & gas expl.
100[1]	4	2,200[1]	30	(93)	3	2	1979	Mfr. home video prods.
300[1]	(83)	8,000[1]	180	(53)	30	0	1977	Mfr. fiber-optics communications
51[1]	(771)	2,225[1]	45	(88)	11	0	1977	Mfr. radiant heating panels, thermal signature targets
2,600	220	13,600	164	(55)	13	0	1977	Mfr. matrix printers
1,100	(11)	6,013	85	(75)	9	0	1977	Mfr. intelligent disk & tape controllers
142	2	2,639	36	(89)	4	0	1977	Mfr. computerized medical testing systs.
2,370	51	8,476	750	(19)	45	8	1977	Mfr. plumbing fixtures & accessories

Rank		Company	Sales growth (1979-83)		Sales ($000)		
'84	'83		Percent increase	Compound annual rate	'83	(rank)	'79
51	☐	**Concept Development** (Omaha)	1,477	99	27,613	(40)	1,751
52	☐	**Wedtech** (New York City)	1,461	99	27,000[1]	(41)	1,730
53	☐	**Terrano** (Lincoln, NE)	1,456	99	7,096[2]	(78)	456
54	☐	**Tender Loving Care** (Lake Success, NY)	1,394	97	6,200	(80)	415
55	☐	**Pope, Evans & Robbins** (New York City)	1,354	95	184,065	(4)	12,656
56	☐	**Doran Energy** (Alice, TX)	1,351	95	3,846	(93)	265
57	11	**ASK Computer Systems** (Los Altos, CA)	1,319	94	39,388	(29)	2,775
58	19	**Crime Control** (Indianapolis)	1,305	94	40,508	(27)	2,883
59	27	**Comair** (Hebron, KY)	1304	94	19,504	(52)	1,389
60	☐	**Biosearch Medical Products** (Somerville, NJ)	1,300	93	9,800[1]	(70)	700
61	15	**Micom Systems** (Chatsworth, CA)	1,295	93	84,276	(16)	6,042
62	16	**Genentech** (San Francisco)	1,280	93	47,003	(25)	3,406
63	☐	**Biomet** (Warsaw, IN)	1,273	92	7,099	(77)	517
64	☐	**Helionetics** (Irvine, CA)	1,262	92	17,200[1]	(56)	1,263
65	82	**BSN** (Dallas)	1,260	92	20,267	(50)	1,490
66	☐	**Interand** (Chicago)	1,247	92	4,350	(87)	323
67	☐	**Harris & Paulson** (Englewood, CO)	1,246	92	3,445	(96)	256
68	☐	**Electro-Kinetic Systems** (Wilmington, DE)	1,233	91	4,000	(90)	300
69	73	**C. P. Rehab** (New York City)	1,221	91	10,609	(67)	803
70	☐	**Continental Health Affiliates** (Englewood Cliffs, NJ)	1,182	89	14,111	(60)	1,101
71	☐	**BGS Systems** (Waltham, MA)	1,180	89	5,813	(82)	454
72	☐	**Avant-Garde Computing** (Cherry Hill, NJ)	1,156	88	7,209	(76)	574
73	59	**Phoenix American** (Mill Valley, CA)	1,118	87	26,199	(43)	2,151
74	☐	**Byers Communications Systems** (Atlanta)	1,100	86	15,600	(57)	1,300
75	☐	**Jeffrey Martin** (Union, NJ)	1,055	84	65,945	(22)	5,709
76	☐	**Cybermedic** (Boulder, CO)	1,048	84	1,309	(100)	114
77	☐	**Scientific Laboratories** (Denver)	1,032	83	4,210	(88)	372
78	26	**Nutri/System** (Huntingdon Valley, PA)	1,018	82	167,892	(6)	15,023
79	☐	**Andros Analyzers** (Berkeley, CA)	984	81	6,050	(81)	558
80	☐	**Compucare** (McLean, VA)	978	81	39,879	(28)	3,700
81	34	**Texas Energies** (Amarillo, TX)	964	81	10,504	(68)	987
82	☐	**AGS Computers** (Mountainside, NJ)	952	80	145,911	(9)	13,875
83	78	**Scientific Leasing** (Farmington, CT)	949	80	17,949	(53)	1,711
84	☐	**Teleconcepts** (Newington, CT)	942	80	34,475	(35)	3,308
85	☐	**Standun** (Rancho Dominguez, CA)	937	79	35,357	(34)	3,408
86	☐	**Polymeric Resources** (Clifton, NJ)	920	79	5,122	(84)	502
87	☐	**Comp-U-Card International** (Stamford, CT)	919	79	4,156	(89)	408
88	☐	**Andover Controls** (Andover, MA)	914	78	9,725	(71)	959
89	☐	**Nautilus Enviromedical Systems** (Houston)	912	78	3,776	(94)	373
90	☐	**Chemfix Technologies** (Kenner, LA)	874	77	6,353	(79)	652
91	39	**United States Health Care Systems** (Willow Grove, PA)	866	76	95,677	(13)	9,902
92	☐	**Amber Resources** (Denver)	858	76	1,312	(99)	137
93	☐	**Valex Petroleum** (Denver)	848	75	3,869[1]	(92)	408
94	60	**AM Cable TV Industries** (Coopersburg, PA)	848	75	32,764	(36)	3,456
95	☐	**Eaton Financial** (Framingham, MA)	822	74	3,994	(91)	433
96	10	**Movie Systems** (Des Moines)	814	74	13,579	(61)	1,485
97	30	**NBI** (Boulder, CO)	814	74	120,937	(12)	13,236
98	☐	**Forum Group** (Indianapolis)	812	74	89,597	(15)	9,827
99	63	**Health Extension Services** (Syosset, NY)	790	73	24,864	(44)	2,794
100	☐	**Lane Telecommunications** (Houston)	783	72	17,237	(55)	1,952

[1] Estimate (12/31 closing figure unavailable at press time), [2] nine-month figure, [3] 1982 figure, 12/31 figure unavailable at press time

Net income ($000)		Equity	No. of employees			Acquisitions	Date inc.	Business description
'83	'79	'83	'83	(rank)	'79	'79-'83		
2,997	210	9,648	460	(25)	36	1	1978	Restaurant franchisee
5,000[1]	215	29,000[1]	450	(26)	100	0	1965	Mfr. machine parts & engines
(359)[2]	68	(983)[3]	88	(74)	10	0	1977	Health-care computer systs. software
65	(12)	3,990	90	(71)	15	2	1978	Provides health-care services
7,828	283	42,546	400	(29)	150	3	1926	Mfr. protective fabrics, clothing, gear
(4)	(17)	2,691	30	(92)	5	1	1972	Oil & gas prod.
3,905	237	28,808	275	(40)	30	1	1974	Management info. systs.
4,764	509	36,649	921	(15)	55	15	1978	Electronic security systs.
1,354	120	4,394	326	(37)	35	0	1977	Regional airline
400[1]	77	4,600[1]	128	(62)	60	1	1975	Enteral feeding systs., diagnostics
13,434	794	58,530	956	(13)	123	6	1976	Mfr. data-communications equip.
1,128	116	96,382	544	(22)	55	0	1976	Mfr. pharmaceuticals & industrial chemicals
725	(106)	4,069	83	(76)	24	0	1977	Mfr. orthopedic support devices
2,200[1]	656	11,000[1]	353	(34)	50	2	1970	Mfr. power conversion equip. & lasers
537[2]	121	15,246[1]	250	(45)	21	6	1972	Mail-order sports equip.
(450)	(93)	6,195	62	(83)	7	0	1969	Mfr. teleconferencing & graphic systs.
(1,100)	0	1,800	70	(79)	10	0	1977	Mfr. office automation for legal industry
222[2]	(20)	1,529[2]	8	(100)	3	0	1972	Mfr. special coatings for computer industry
1,904	198	44,238	102	(70)	15	2	1972	Cardiac rehab. management svcs.
1,532	(192)	7,500	110	(68)	25	1	1976	Health-care services
896	(42)	1,479	15	(97)	15	0	1975	Systs. diagnostic software
578	36	404	89	(73)	17	0	1978	Integrated software-based systs.
6,003	525	18,558	139	(59)	29	0	1972	Ltd. prtnshps. in data process. equip. leasing
967	80	1,105	260	(43)	32	0	1977	Mfr. telecommunications systs.
8,076	400	18,481	142	(57)	71	0	1960	Health & beauty aids
(567)	(65)	2,833	23	(94)	2	0	1977	Computer-assisted medical diagnostics
(1,198)	10	2,542	130	(61)	6	2	1974	Cancer diagnostic svcs. & prods.
13,098	2,776	52,992	3,100	(4)	300	3	1976	Owner/franchisor weight-loss centers
812	(110)	1,560	66	(80)	25	0	1968	Mfr. gas-measuring instruments
2,134	98	25,211	700	(20)	165	3	1975	Software, info. process. for hospitals & health-care
421	102	12,432	127	(64)	6	0	1966	Oil & gas expl. & prod.
5,785	483	35,222	1,100	(12)	257	7	1967	Computer syst. development
2,415	252	20,078	65	(82)	12	0	1968	Leases data process. equip. to health-care providers
2,015	10	21,000	75	(78)	35	0	1969	Mfr. decorative telephones
1,836	(67)	13,937	382	(31)	82	3	1968	Mfr. industrial machines, lasers
403	57	3,325	16	(95)	11	0	1976	Plastic-waste recycling
(2,519)	(1,015)	(6,286)	90	(72)	40	0	1973	Electronic shopping devices, databases
1,016	(105)	2,517	141	(58)	22	0	1976	Mfr. microprocessor-based bldg. automat. systs.
642	40	(215)	45	(87)	12	0	1974	Mfr. life-support systs.
527	(133)	1,752	47	(86)	25	0	1977	Treats liquid hazardous & non-hazardous waste
3,206	(556)	42,628	268	(41)	80	0	1976	Health care; HMO
(144)	16	4,086	16	(96)	3	2	1978	Oil & gas exploration, development
0[1]	133	10,000[1]	14	(98)	4	2	1975	Oil & gas expl.
1,072	194	15,827	652	(21)	143	1	1974	Aerial cable distribution networks
419	69	1,317	32	(91)	7	0	1974	Leases office equip. & furniture
(1,255)	(485)	(248)	183	(52)	45	3	1975	Operates cable TV systs.
4,590	1,651	86,432	1,846	(9)	248	0	1973	Mfr. microprocessor-controlled word process. systs.
3,851	1,003	44,796	4,000	(1)	120	6	1969	Provides health care
538	(197)	9,765	2,819	(5)	490	3	1975	Home health care & institutional staffing
522	(49)	9,179	200	(48)	35	1	1976	Mfr. microprocessor-based terminals & systs.

HOW THE INC. 100 ARE SELECTED

Companies are ranked according to their percentage increase in sales during the previous five years, in this case, 1979–83. To be included in the INC. 100, each company must meet the following criteria:

1. The company is an independent, publicly held corporation in a manufacturing, mining, or service industry. Utilities, banks, and other financial institutions are excluded.

2. The company was publicly held as of December 31, 1983.

3. The company shows an operating/sales history of at least five years, with an increase in its fiscal 1983 closing figure. Companies showing growth in the 1979–83 base period but a sales decline in the last year are excluded.

4. The company's 1979 sales were at least $100,000 but less than $25 million.

Company data is gathered from prospectuses, 10-Ks, annual reports, and various directories. Additional information is collected from a wide array of newsletters, trade magazines, and other business publications. Telephone interviews are conducted with executives of the corporations to verify the figures.

By applying the four criteria listed above, and by using a five-year growth rate of at least 400%, INC. reduced the number of companies that potentially qualified for the list from 13,000 to 194. Among those considered were 888 companies that went public in 1983.

An editorial team led by senior editor Bradford W. Ketchum Jr. selected the 1984 INC. 100. Chief researcher was Nell Margolis, assisted by Susan Buchsbaum, Donna Fenn, Julia Homer, and Joshua Hyatt. Data processing was directed by Elyse Friedman, senior research editor.

WHO'S WHO BY INDUSTRY: PETRO SETS THE PACE

The oil and gas industry led the growth pack among the 1984 INC. 100. Led by Endevco, which multiplied its sales 437.7 times in the past five years, the seven companies in the oil and gas business averaged a five-year sales multiple of 114.4. Ranking second and third in growth are companies in the food service and transportation industries, with average five-year multiples of 55.7 and 49.5, respectively.

As a group, the 21 makers of computers and computer-related products have expanded their sales an average of 47.1 times since 1979, while those in the data processing and software fields have registered a more modest 16.4 multiple.

The miscellaneous category includes leaders in printing presses, gas-measuring instruments, hazardous-waste treatment, and office-equipment leasing.

Oil & Gas (114.4)
Endevco (437.7)
Yankee Oil & Gas (300.1)
Nugget (19.0)
Doran Energy (14.5)
Texas Energies (10.6)
Amber Resources (9.6)
Valex Petroleum (9.5)

Food Services (55.7)
Consul (97.4)
Pizza Time Theatre (54.0)
Concept Development (15.8)

Transportation (49.5)
Atlantic Southeast Airlines (68.0)
BRAE (66.6)
Comair (14.0)

Computers & Related Products (47.1)
Ultimate (148.6)
Emulex (119.7)
TeleVideo Systems (74.8)
Zitel (72.2)
Applied Circuit Technology (61.9)
Protocol Computers (56.4)
ComputerCraft (55.6)
Information Resources (54.2)
Onyx-IMI (54.2)
Tandon (46.2)
Rexon (43.6)
Altos Computer Systems (32.1)
ZyMOS (25.4)
Ciprico (24.7)
Quality Micro Systems (23.9)
ISC Systems (21.2)
Kaypro (19.7)
Datasouth Computer (17.7)
Distributed Logic (17.5)
Andover Controls (10.1)
Lane Telecommunications (8.8)

Heating Equipment (30.8)
Servamatic Solar Systems (46.6)
Novan Energy (27.7)
TVI Energy (17.9)

Medical/Health Products & Services (25.6)
Healthdyne (104.4)
Independence Health Plan (76.8)
Psych Systems (46.2)
Genex (43.5)
Lifeline Systems (43.1)
Home Health Care of America (37.5)
Diasonics (34.1)
Electro-Biology (29.1)
Medical Graphics (17.4)
Terrano (15.6)
Tender Loving Care (14.9)
Biosearch Medical Products (14.0)
Genentech (13.8)
Biomet (13.7)
Electro-Kinetic Systems (13.3)
C. P. Rehab (13.2)
Continental Health Affiliates (12.8)
Jeffrey Martin (11.6)
Cybermedic (11.5)
Scientific Laboratories (11.3)
Nautilus Enviromedical System (10.1)
United States Health Care System (9.7)
Forum Group (9.1)
Health Extension Services (8.9)

Consumer & Consumer Related Products (20.9)
Home Depot (36.5)
Kloss Video (27.9)
Cincinnati Microwave (27.4)
Centuri (22.4)
Video Connection of America (18.4)
JP Industries (16.8)
Pope, Evans & Robbins (14.5)
BSN (13.6)
Teleconcepts (10.4)

Data Processing & Software (16.4)
Margaux Controls (44.8)
Data Switch (27.1)
Masstor Systems (21.0)
ASK Computer Systems (14.2)
Helionetics (13.6)
Harris & Paulson (13.5)
BGS Systems (12.8)
Avant-Garde Computing (12.6)
Phoenix American (12.2)
Compucare (10.8)
AGS Computers (10.5)
Scientific Leasing (10.5)
Comp-U-Card International (10.2)

Telecommunications & Cable TV (12.2)
Fibronics (18.0)
AM Cable TV Industries (9.5)
Movie Systems (9.1)

Data Communications & Word Processing (12.1)
Micom Systems (13.9)
Interand (13.5)
Byers Communications Systems (12.0)
NBI (9.1)

Miscellaneous (11.2)
Publishers Equipment (29.3)
HCW Oil & Gas (24.8)
Wedtech (15.6)
Crime Control (14.1)
Nutri/System (11.2)
Andros Analyzers (10.8)
Standun (10.4)
Polymeric Resources (10.2)
Chemfix Technologies (9.7)
Eaton Financial (9.2)
Fibronics (18.0)
AM Cable TV Industries (9.5)
Movie Systems (9.1)

Investing in Growth Companies

THE YEAR OF THE FAST-GROWTH BEAR

When the Big Board sniffles, it's the INC. 100 that gets pneumonia. This year's 16% drop can in part be blamed on the earnings ailments of larger companies.

Once again INC. has engaged in the fruitless exercise of purchasing a hypothetical $100 worth of shares of each company on the INC. 100 list and seeing how the paper investment would have fared—this time, from March 16, 1983, to March 15, 1984. We say "fruitless" because, even with actual greenbacks, the exercise can't be done. After all, no one knows a year in advance which companies will be admitted to the next distinguished family of fastest-growers. Still, the outcome is not without its academic interest.

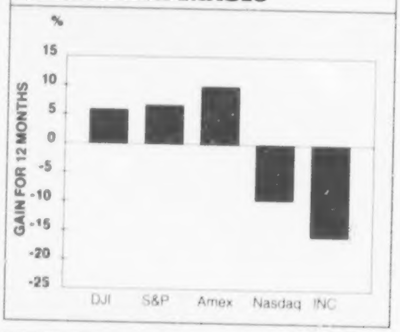
Sad to say, INC. chalked up the poorest result among four stock market indexes—although not nearly by the largest degree in the five-year history of the INC. 100. Two years back, in the recession of 1982, INC. 100 stocks shed a hefty 27%. But last year, they led the batch with a gain of 72%. This year, they were down again, by 16%, despite gains in other averages—which shows that fast sales growth alone does not a stock market winner make. As has been pointed out elsewhere in this issue, 1984's median compound annual sales growth rate was a hefty 101%, yet the INC. 100 median stock market move was a *loss* of about 12%.

The current batch is distinctive in the unusually high number of stocks that entered the market via initial public offerings in the course of the year. No fewer than 91 are traded over-the-counter, usually the market of necessity for young, lightly capitalized IPOs. While IPOs were a hot arena for a few months, they cooled off markedly toward winter, and many issues dropped well below their offering price. Of the 38 IPOs on the list, only 8 managed to hold a gain at the end.

Indeed, anybody who stubbornly husbanded stocks of smaller-cap companies can probably provide firm, if dismayed, witness that the bear market started as far back as a year ago. Many stocks of smaller companies topped out way back last summer, while the big blue chips of the Dow Jones Industrials went on to set a new all-time high in November of 1983.

Unlike previous years, high interest rates couldn't be blamed for stifling profits in 1983. Rather, the prime culprit was the fear of a lack of working capital. The prominent case of Osborne Computer Corp. was typically unsettling, as the private company soared to nine-figure sales in 18 months, then couldn't even pay its bills to vendors. Ironically, the public offering which that company was about to undertake could well have saved it. Nevertheless, investors took the lesson of Osborne to be that thinly capitalized fast growth was just too frightening.

INC. VERSUS POPULAR AVERAGES



RELATIVE MARKET PERFORMANCE

	3/16/83	3/16/84	% gain
INC. 100	$ 100.0	$ 84.0	(16)
DJI	1,116	1,184	06
S&P 400	168	180	07
Amex	191	212	10
NASDAQ	316	289	(09)

Due to the fact that the criteria for inclusion in the INC. 100 rules out capital institutions such as banks and holding companies, INC. pits the stock market performance of its entries against the industrial components, rather than the composites, of common stock indexes. Unlike the other averages, INC.'s "average" is reborn each year with a new group of stocks (see text), and so cannot be compared with past listings. But adding in the negative 12-month result of the OTC market, it is clear that the period involved—mid-March 1983 to mid-March 1984—was generally not the best of times for the stocks of smaller companies, despite enhanced revenue growth.

In other instances, overcrowded markets hurt quarterly earnings growth, which in turn sent stockholders scurrying for the exit. Many of the abandoned stocks were in technology industries, a factor that dragged INC.'s results down even beyond the general run of the speculative over-the-counter market, whose average also declined significantly. Of the 34 INC. 100 companies involved in computers and data processing, a scant half dozen managed stock market gains, despite their heady sales growth rates. The atmosphere for technology investment turned gloomy well beyond what conditions warranted. On the other hand, even astute investors are having trouble picking the probable stayers among computer companies.

Then, too, the troubles of larger, Big Board companies like Texas Instruments, Coleco Industries, and Digital Equipment didn't help the newer entries, either, even though the latter can be quicker to readjust their marketing strategies and product lines. It will undoubtedly take the investment community a while to understand the changing nature of small businesses' approach to marketing, just as it took many small businesses themselves time to appreciate the compelling nature of that force.

Even so, it is encouraging to note that the biggest winner, Byers Communications Systems Inc. (#74)—up 148%—is in the high-technology business. And, as we have seen many times, things can change mighty fast. Last year, for example, it was the sorry oils that were the INC. 100's albatross; this year, four of seven oil and gas issues were able to post gains against the trend—and none was a takeover candidate. One, Yankee Oil & Gas Inc., took second place with a profit of 79%. The oil group's performance, at least to some degree, gives substance to our closing thought last year, when we optimistically noted that "it is not beyond the realm of possibility that . . . this group could lead next year's INC. 100 gainers."

Viewing the litter of 73 losers, we offer no such solace this time, except to note that if the record growth rates of the 1984 INC. 100 can't be converted to solid per-share earnings over the months to come, either the economy is more troubled than it seems, or newly public small-business management still has a lot to learn. Chances are that neither is entirely true. In which case investors should perhaps be taking a second look. *Robert A. Mamis*

Of the 34 INC. 100 companies involved in computers and data processing, only 6 managed stock market gains, despite heady sales growth rates.

INC. 100 MARKET PERFORMANCE

Company (symbol/exchange)	1984 rank	3/83	3/84	$100 Worth
1. **Byers Communications** (BYCM/O)	74	$7.88	$19.50	$247.62
2. **Yankee Oil & Gas** (YNK/A)[1]	2	7.45	13.38	179.45
3. **Independence Health** (IHPI/O)[29]	7	13.44	23.50	174.88
4. **Health Extension Srvcs.** (HLP/A)	99	10.13	17.50	172.84
5. **Electro-Kinetic** (EKSIA/O)[28]	68	1.38	2.38	172.73
6. **Servamatic Solar** (SSSI/O)	18	1.94	3.25	167.74
7. **U.S. Health Care** (USHC/O)[2]	91	15.22	22.50	147.81
8. **Concept Develop.** (CDII/O)[3, 31]	51	14.64	21.00	143.41
9. **Helionetics** (HILX/O)	64	14.81	20.75	140.08
10. **Movie Systems** (MOVSC/O)[4]	96	2.37	3.25	137.29
11. **Wedtech** (WEDT/O)[27]	52	15.88	21.50	135.43
12. **Chemfix Tech.** (CFIX/O)[5]	90	2.50	3.38	135.00
13. **Doran Energy** (DORE/O)	56	1.88	2.50	133.33
14. **Home Depot** (HOMD/O)[6]	26	15.00	19.50	130.00
15. **Andros Analyzers** (ANDY/O)	79	6.13	7.75	126.53
16. **JP Industries** (JPII/O)[30]	50	10.00	12.50	125.00
17. **Ultimate** (ULT/A)[7]	3	13.08	16.25	124.20
18. **Emulex** (EMLX/O)[8]	4	14.75	18.00	122.03
19. **Kloss Video** (KLOS/O)	31	6.88	8.25	120.00
20. **Comair** (COMR/O)	59	9.88	11.75	118.99
21. **Texas Energies** (TXEN/O)	81	2.75	3.25	118.18
22. **AGS Computers** (AGSC/O)	82	18.63	21.50	115.44
23. **Info. Resources** (IRIC/O)[9]	15	22.50	24.50	108.89
24. **Tender Loving Care** (TLCI/O)[28]	54	5.69	5.88	103.30
25. **Nugget** (NUGO/O)	43	0.97	1.00	103.23
26. **ASK Computer** (ASKI/O)[10]	57	14.94	15.25	102.09
27. **Distributed Logic** (DLOG/O)[25]	48	10.38	10.50	101.20
28. **Micom Systems** (MICS/O)[11]	61	34.88	34.75	99.64
29. **Eaton Financial** (EATO/O)[28]	95	8.19	8.00	97.71
30. **Consul** (CNSL/O)	6	13.56	13.25	97.70
31. **Scientific Leasing** (SG/A)	83	25.81	24.50	94.92
32. **Nautilus Enviromed.**(NENV/O)[29]	89	1.75	1.64	93.43
33. **Lane Telecommun.** (LNTL/O)[30]	100	7.50	7.00	93.33
34. **Endevco** (ENDV/O)[29]	1	5.31	4.88	91.76
35. **Fibronics** (FBRX/O)[29]	45	7.50	6.88	91.67
36. **Centuri** (CENT/O)	39	2.47	2.25	91.14
37. **Data Switch** (DASW/O)[12]	34	22.56	20.50	90.86
38. **Biomet** (BMET/O)[13]	63	10.81	9.75	90.17
39. **Zitel** (ZITL/O)[31]	9	10.19	9.00	88.34
40. **Cincinn. Microwave** (CNMW/O)[31]	33	10.88	9.50	87.36
41. **BRAE** (BRAE/O)	11	13.25	11.50	86.79
42. **Rexon** (REXN/O)	22	14.00	12.00	85.71
43. **Genentech** (GENE/O)[14]	62	41.13	35.00	85.11
44. **Ciprico** (CPCI/O)[26]	37	13.25	11.00	83.02
45. **Andover Controls** (ANDO/O)[30]	88	10.00	8.25	82.50
46. **Comp-U-Card Int'l.** (CUCD/O)[28]	87	21.38	17.50	81.87
47. **Standun** (SDUN/O)[15]	85	9.60	7.75	80.73
48. **HCW Oil & Gas** (HCWO/O)[30]	36	12.88	10.25	79.61
49. **Continental Health** (CTHL/O)[23]	70	9.75	7.75	79.49
50. **ComputerCraft** (CRFT/O)[27]	14	9.13	7.25	79.45
51. **Amber Resources** (AMBR/O)	92	0.81	0.63	76.92
52. **Phoenix American** (PHXA/O)[16]	73	11.06	8.50	76.84
53. **Quality Micro** Systems(QMSI/O)	38	20.88	16.00	76.65
54. **Kaypro** (KPRO/O)[27]	42	10.31	7.88	76.36
55. **Compucare** (CMPC/O)[30]	80	15.00	11.25	75.00
56. **Genex** (GNEX/O)	23	17.94	13.38	74.56
57. **Terrano** (TRNO/O)[25]	53	7.50	5.50	73.33
58. **Tandon** (TCOR/O)[17]	20	19.25	14.00	72.73
59. **C.P. Rehab** (CRHB/O)[18]	69	16.50	12.00	72.73
60. **ISC Systems** (ISCS/O)	40	17.94	13.00	72.47
61. **Forum Group** (FOUR/O)[19]	98	7.13	5.13	71.93
62. **Valex Petroleum** (VALP/O)	93	0.66	0.47	71.43
63. **Atlantic S.E. Airlines** (ASAI/O)	10	12.63	8.75	69.31
64. **Novan Energy** (NOVN/O)	32	0.38	0.25	66.67
65. **Medical Graphics** (MGCC/O)	49	11.25	7.50	66.67
66. **Crime Control** (CRIM/O)	58	18.00	11.75	65.28
67. **Avant-Garde Comp.** (AVGA/O)[25]	72	23.75	15.25	64.21
68. **BSN** (BSN/A)	65	7.31	4.63	63.25
69. **Onyx-IMI** (ONIX/O)	16	10.00	6.13	61.25
70. **Polymeric Resources** (POLR/O)	86	6.25	3.75	60.00
71. **Protocol Computers** (PCII/O)[28]	13	12.06	7.00	58.03
72. **Datasouth Comp.**(DSCC/O)[27]	47	11.88	6.63	55.79
73. **Biosearch Med. Prods.** (BMPI/O)	60	11.88	6.63	55.79
74. **Altos Computer** (ALTO/O)	28	22.00	12.25	55.68
75. **Interand** (IRND/O)[25]	66	18.25	10.00	54.79
76. **TeleVideo Systems** (TELV/O)	8	22.88	12.38	54.10
77. **Publishers Equipment** (PECN/O)	29	12.50	6.75	54.00
78. **BGS Systems** (BGSS/O)[25]	71	23.50	12.50	53.19
79. **Jeffrey Martin** (JFRY/O)[24]	75	14.63	7.63	52.14
80. **NBI** (NBI/N)	97	41.13	21.38	51.98
81. **Scientific Labs** (SILA/O)[20]	77	2.97	1.50	50.53
82. **Applied Circuit** (ACRT/O)[27]	12	11.00	5.50	50.00
83. **ZyMOS** (ZMOS/O)[26]	35	11.38	5.50	48.35
84. **Pope, Evans & Robbins** (PER/A)	55	14.69	6.63	45.11
85. **Lifeline Systems** (LIFE/O)[26]	24	14.25	6.00	42.11
86. **Margaux Controls** (MRGX/O)[25]	21	17.50	7.25	41.43
87. **AM Cable TV Indust.** (AMTV/O)	94	7.00	2.88	41.07
88. **Cybermedic** (CMED/O)[26]	76	1.06	0.41	38.24
89. **TVI Energy** (TVIE/O)	46	4.50	1.69	37.50
90. **Healthdyne** (HDYN/O)[21]	5	27.08	9.88	36.46
91. **Video Connection** (VIDC/O)	44	5.69	2.00	35.16
92. **Electro-Biology** (EBII/O)[22]	30	23.92	8.25	34.49
93. **Masstor Systems** (MSCO/O)	41	18.13	6.25	34.48
94. **Home Health Care** (HHCA/O)	25	24.13	8.25	34.20
95. **Pizza Time Theatre** (CHKY/O)	17	16.75	5.25	31.34
96. **Psych Systems** (PSYC/O)	19	13.13	3.75	28.57
97. **Nutri/System** (NTR/N)	78	26.63	7.50	28.17
98. **Teleconcepts** (TCC/A)[23]	84	28.00	7.00	25.00
99. **Diasonics** (DNIC/O)	27	22.38	4.88	21.79
100. **Harris & Paulson** (HAPI/O)	67	13.88	1.38	9.91

[1] 4:3 split, 7/83; [2] 50% stock div., 5/83—3:2 split, 9/83; [3] 5% stock div., 3/84; [4] 4:3 split, 8/83; [5] 3:1 split, 7/83; [6] 2:1 split, 6/83; [7] 3:2 split, 9/83; [8] 2:1 split, 2/84; [9] 2:1 split, 8/83; [10] 2:1 split, 9/83; [11] 2:1 split, 3/83; [12] 2:1 split, 6/83; [13] 2:1 split, 3/83—2:1 split, 7/83; [14] 3:2 split, 3/83; [15] split, 8/83; [16] 2:1 split, 9/83; [17] 2:1 split, 4/83; [18] 100% stock div., 3/83; [19] 2:1 split, 8/83; [20] recapitalized, 1:10, 6/83; [21] 3:2 split, 5/83; [22] 3:2 split, 3/83; [23] first public 4/83; [24] first public 5/83; [25] first public 6/83; [26] first public 7/83; [27] first public 8/83; [28] first public 9/83; [29] first public 10/83; [30] first public 11/83; [31] first public 12/83

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**Debbi Fields,
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COOKIE WARS

It takes more than the right recipe to compete in a tough market

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'BEING DEAD IS BAD FOR BUSINESS'

The business community joins the nuclear debate

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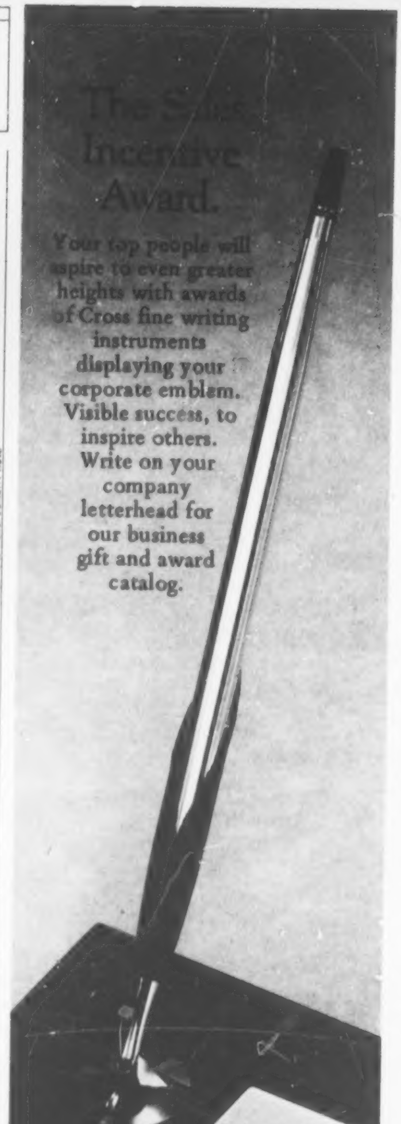

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between how good an investment is and how much money the broker will make." If you want to use a scout, of course, you will have to pay him, too—one way or another. Stolper and a few others work independently and charge a fixed rate for their services; Stolper's is a $1,500 one-time fee for finding an adviser, plus $500 a year for monitoring. Other scouts, such as Daniels, Goldman, and Brown, are connected to brokerage houses. Although they charge no direct fee for their services, they expect to make money on commissions from trades ordered by the managers they recommend.

What you pay, however, is less important than what you get for your money. "Entrepreneurs are so busy making money," laughs Marilyn Cohen, "that they sometimes forget about the money they have, which is sitting around doing nothing." If you can change that situation, it can't help but be a change for the better.

INVESTING FOR COLLEGE

College degrees, you may have noticed, are not coming cheap these days. Costs at both public and private four-year colleges have more than doubled in the past 10 years, and are still on the way up. The smarter your child, the bigger the bills may be. Next year, parents of Harvard students will pay $14,100 for tuition, room, and board, plus money for books, incidentals, and holiday plane fare home. Other top-tier schools are comparable.

Suggestion No. 1: If your children are young enough, set aside the funds for their education now. Your children's future shouldn't depend on how the economy or your business is shaping up when they are ready for college.

Suggestion No. 2: Fund the prospective tuition bills with zero-coupon bonds. First, project what you think college costs are likely to be when your children are ready for college. Then, based on those projections, buy the appropriate quantity of zeros (see box, right).

Zero-coupon bonds are just what their name implies: bonds with no semiannual coupons to clip. Instead of paying interest every six months, they in effect pay their interest all at once, when the bonds mature.

That means you pay a lot less for a zero than you would for a conventional bond. Recently, for example, you could have bought a $10,000 Allied Chemical Corp. zero, maturing in October 1992, for $3,500. An ordinary eight-years-to-maturity bond with a similar yield to maturity would cost about $6,600.

Zeros also let you lock in today's interest rates. The yield to maturity quoted on ordinary bonds assumes that you reinvest the bonds' coupons at the same rate as when you bought the bonds. But if maturity is some years away, it is hard to know how much you will wind up with. Not so with zeros.

> With college costs increasing, investing in zero-coupon bonds now will give you the money to pay your child's tuition bills when they start arriving.

Put together, these features allow for pinpoint planning. Have an eight-year-old due to enter college in 1994? Buy $21,600 worth of zeros today, and you will have the $75,000 that you will probably need to put him or her through a typical four-year private college.

Zeros have been touted as good investments for individual retirement accounts and other retirement plans. There is a reason for that: Buy them outside of a tax-sheltered plan and you are liable for taxes on the imputed income. This leaves you in the unhappy situation of paying taxes on money you haven't seen.

Earmarking the bonds for college, however, means that you can put them in your child's name. Under the Uniform Gifts to Minors Act, you can give your child (or grandchild, for that matter) up to $10,000 a year in cash or securities ($20,000 if the gift is from a couple) without paying federal gift taxes. Income from the investments is then taxed at the child's tax rate, which may well be zero. And although the assets become the child's once he reaches legal age, you can use them in the meantime for any purpose (other than paying for necessities) that redounds to the child's benefit. College counts in that category.

FINANCING COLLEGE COSTS

The table below shows the projected cost of a typical public and private four-year college education, along with the amount you need to invest in zero coupon bonds today (at slightly more than 12%) to earn what you will need later. The projected college costs assume that college expenses increase 6% annually—slightly higher than the rate of inflation over the past several

	Projected cost (4 years)*	Investment required
PUBLIC COLLEGES		
In 5 years	$28,800	$15,700
In 10 years	38,500	10,970
In 15 years	51,600	8,250
In 18 years	61,400	6,860
PRIVATE COLLEGES		
In 5 years	56,000	30,400
In 10 years	75,000	21,600
In 15 years	100,400	15,850
In 18 years	119,500	13,400

*All figures rounded

Source: T. Rowe Price Associates Inc.

The only real risk with corporate zero-coupon bonds is the chance that the issuing company will go bankrupt before the bond matures. To get around that problem, several major brokerage houses have found a way to turn U.S. government obligations into zero-like assets. They package long-term Treasury bonds, strip off the coupons, and sell investors receipts representing the bonds' future interest and principal payments. The effect is the same as with corporate zeros.

Merrill Lynch Capital Markets, the first firm to offer these investments, called its product TIGRs, for Treasury Investment Growth Receipts. Soon after Merrill's introduction, Salomon Bros. Inc. and Shearson Lehman/American Express created a virtual menagerie with their own tongue-in-cheek-labeled versions: CATS, for Certificates of Accrual on Treasury Securities, from Salomon, and LIONs, for Lehman Investment Opportunity Notes, from Shearson Lehman. Most brokers can purchase any of these feline fineries for you—or any of the less imaginatively named but similar products packaged by other big houses.

For longer-term investments, packaged Treasuries may be the best bet. "The bond market is so skittish now that the spread between the yield on a good-quality corporate zero-coupon bond and the yield on a Treasury zero-coupon bond is very small," advises Richard Whitman, vice-president at the New York brokerage firm of Oppenheimer & Co. "Why take additional risk when you can have a guarantee from the U.S. government?"

If you do use zero-coupon bonds to save for your child's college education, don't count on their maintaining value in the meantime: As with all bonds, rising interest rates will undermine their market value. But if you have timed their maturities appropriately, they will recover that value in time for you to ship the money off to the ivy-covered walls.

Now, about graduate school. . .

—Lisa R. Sheeran

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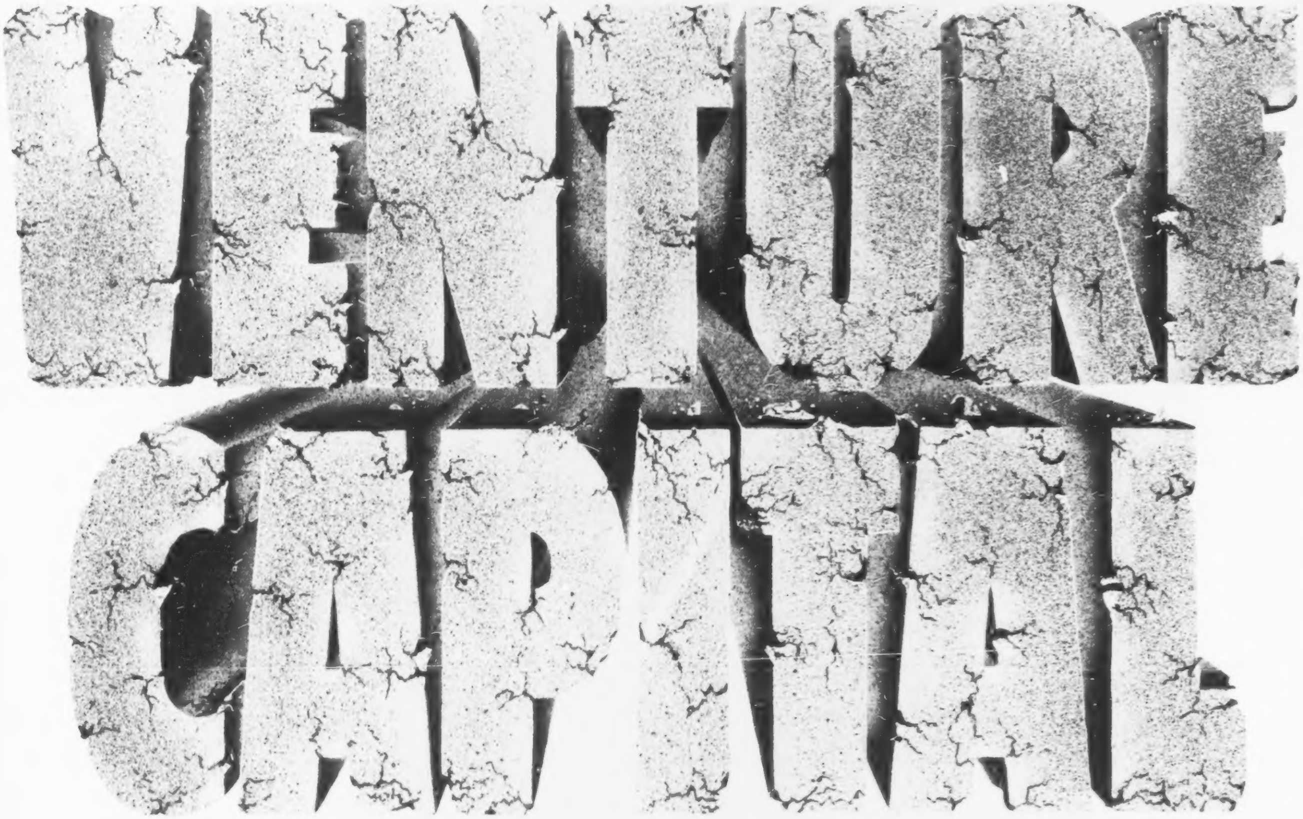
A SPECIAL REPORT

How the venture capital boom is "leading to disaster"

Why smart companies are saying NO to VENTURE CAPITAL



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Cover illustration
Bruce Sanders

Is this the way it usually works?

One of Kentucky's local marketing groups recently invited me to talk about Maker's Mark and what's causing the sudden national interest in our whisky.

I started to tell them how Maker's Mark was the realization of a dream my father had to make his own kind of whisky. His was to be a soft-spoken whisky, handcrafted in very small quantities the time-honored way.

Until recently, Maker's Mark was considered one of Kentucky's best-kept secrets. Then, suddenly, it was discovered by the rest of the country.

What the group really wanted to know, however, was what marketing strategy was behind this phenomenon.

One person wanted to know if we were using life-style trend research to target the up-scale consumer market. Another person wanted to know if we were using premiums and incentives like tee-shirts, belt buckles and what they call "good-buddy" caps with our name on them to reinforce brand loyalty. And still another person wanted to know if we were actively pursuing celebrity endorsements by big-name country and western entertainers.

The more they talked, the more confused I became. We just don't do any of that. And because we don't, I think we sort of confused them. In fact, by the time it was over, they seemed to be mystified as to what's behind the growing interest in Maker's Mark. Since I was the group's guest speaker, I felt sort of obligated to try and provide them with "The Answer." But the best I could do was another question:

Could it be the whisky?

Bill Samuels, Jr.
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THE HIGH-TECH DREAM WON'T COME TRUE

It isn't just the transition from smokestack to silicon that's troubling the American economy. The real issue is managers' capability to produce.

By Seymour Melman

High-tech industries are already showing signs of decay, says Seymour Melman.

Don't worry, the optimists tell us, America is just in a period of industrial transition—from smokestack to high technology. The changeover, as painful as it may be, will soon bring the country back to prosperity.

That is a nice high-tech dream, but an increasing accumulation of evidence suggests that it won't come true. To understand why, it helps to appreciate the full meaning of the economic and technical decay affecting many U.S. industries.

Look, for example, at the proportion of the goods recently consumed by Americans that was supplied from abroad. The numbers in the accompanying chart (see page 14)—from a sampling of important industries—reflect not only money flow, but also the approximate decline in U.S. employment in these and related industries: more than 2 million jobs lost, *permanently*. Against this loss we should consider estimates by the Bureau of Labor Statistics that computer and computer-related industries will, by 1990, generate only 500,000 new jobs. Note the 1.5-million difference.

Even if high technology could create more new jobs, heavy demands from the military impose a major constraint on the continued expansion of electronics-based industries. Indeed, in 1982, the trade magazine *Electronics* judged that "The nation's electronics industries do not have the technological skills and experience to meet military requirements and at the same time cope successfully with competition from corporations in West Europe and Japan—allies all—in the burgeoning consumer, computer, telecommunications, and test equipment markets."

It is alarming that high-tech industries are already showing the familiar signs of decay—the same pattern of decline that we saw in American smokestack industries. Large and small U.S. electronics companies are:

☐ subcontracting component production abroad; or

☐ investing, either by themselves or in partnership with foreign companies, in overseas plants to manufacture complete products designed and marketed in the United States; or even

☐ moving all design, engineering, and manufacturing operations overseas.

Consider, for example, the IBM Personal Computer. Its cathode ray tube assemblies are made in Taiwan and Korea. Its circuit boards are also assembled outside the United States, and recently IBM Corp. announced it would subcontract the disk drive in Hong Kong. Last year, IBM arranged for Matsushita to produce a complete PC in Japan for sale in the Middle East and some European markets. While these schemes yield short-term cost advantages, and conveniently bypass production problems, they also produce fewer job opportunities in the United States.

Finally, the extraordinary attention given to computers and allied equipment in the business press tends to obscure the fact that computers are essentially control and communications devices—production aids. By themselves they produce nothing, and having more computers benefits us little if the industrial production they are intended to modernize has all moved abroad.

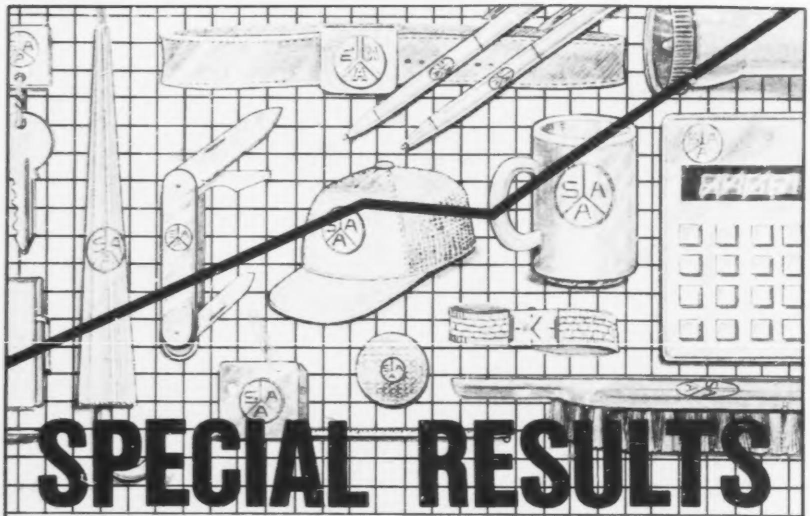
Part and parcel of American industrial decay has been a change in the culture of American managers. Before World War II, the U.S. style of industrial management celebrated cost-minimizing, manufacturing competence, long-term investments, and a growing U.S. production base. After the war, a transformation occurred. Cost-minimizing was replaced by cost-maximizing, particularly in the network of 37,000 companies oriented to military production. Long-term planning and investing were replaced by short-term calculations and financial operations.

Managers' academic training in recent years has emphasized moneymaking—giving stockholders the largest possible short-term return—above all. The result, unintended and unanticipated, has nonetheless been disastrous, for in the pursuit of higher profits, managers have downgraded the importance of making goods. They have found other ways to make money, and they have lost interest in—and the capability for—organizing work.

In effect, managers have unwittingly broken the social contract that for more than a century accorded them decision-making power and generous rewards in exchange for their organization of work—organization that benefited not only their employees but the wider community as well. By placing money above goods, by moving production outside the United States, American managers have sponsored the nation's industrial decay.

Today the overreaching problems of the American economy are not those of market demand or of adequate investment capital. Instead, America's *capability* to produce is now at issue. For the first time in more than a century of American industrialism, the rate of productivity growth has been too small to offset the rise of various costs. Until 1975, U.S. in-

Seymour Melman, a professor of industrial engineering at Columbia University, is the author of Profits Without Production, *published last year by Alfred A. Knopf.*



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dustry paid the world's highest wages. But high wages didn't impede economic and technical competitiveness, because production-oriented managers once knew how to make productivity grow, and how to use productivity growth as a powerful economic tool. By 1980, the United States ranked about tenth in worker wages.

The long-enduring military economy of the United States has played a leading role in depressing the rate of productivity growth. Every year our military economy absorbs more capital than the combined net profits of all U.S. corporations. It is the largest employer of American engineering and scientific talent, yet it produces no products that have ordinary economic usefulness, either for consumption or for further production.

U.S. Consumption Produced Abroad, 1979–80

Product	%
Automobiles	27
Machine tools	25*
Steel mill products	15
Hand-held calculators	47
Desktop calculators	39
Microwave ovens	22
Communications systems & equipment	16
Integrated circuits	34
X-ray and other irradiation equipment	24
Movie cameras (1977)	74
Black & white televisions	87
Sewing machines (1978)	51
Office dictating machines	100
Bicycles	22
Apparel	20
Leather gloves	37
Footwear	45
Flatware	50

*By 1982 this figure had risen to 42%.

Has American industry passed the point of no return? Has our capacity to manage the production process deteriorated so far that we couldn't regain industrial competence even if we tried?

I don't know. People in the producing occupations—blue-collar workers, engineers, technicians, and production managers—have a major stake in ensuring that we have not passed that point. They alone retain a central interest in and capability for organizing industrial work. And they, among all social and economic groups, should be exercising the decision-influencing power they inherently possess. But so long as they and the rest of us fail to recognize the true causes and real depth of what we dismiss as a temporary industrial transition, our sustained economic decline is inevitable. ☐

Inc.

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HELL NO, WE WON'T GROW
CEOs make the case for controlled growth

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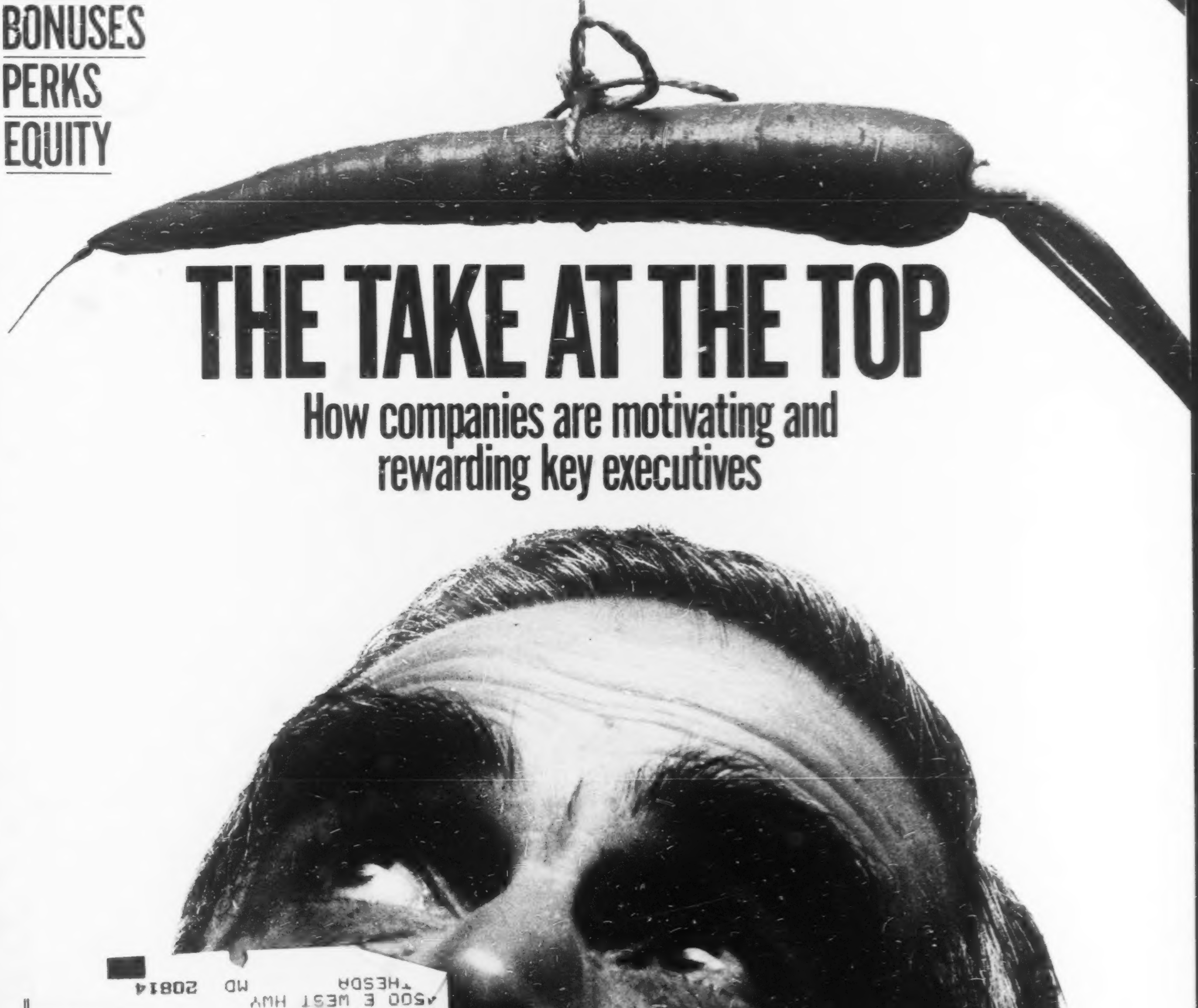

THE TAKE AT THE TOP

How companies are motivating and rewarding key executives

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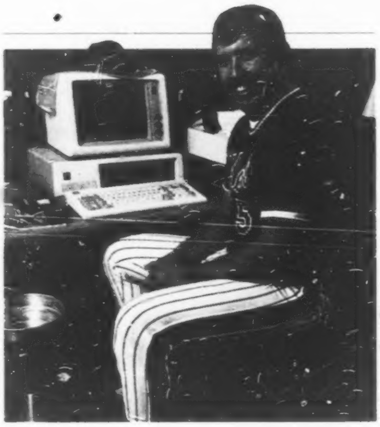
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Cover photo
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INC. SPECIAL REPORT

By Ellen Wojahn

The take at the TOP

How growing companies manage the care and feeding of their key executives.

Their companies are small but healthy—averaging 37 employees, with pretax earnings of $308,500 on revenues of $4.5 million. Ninety-five percent of the organizations are privately held, and more often than not, the chief executive officer—who pulls down $71,797, including salary and bonuses—owns a controlling interest in the company.

The corporate decision-makers who responded to this year's INC. Executive Compensation Survey are heads-up, hands-on managers who know their companies inside-out. But compensation strategy is one issue that many of them would prefer to duck.

"If you're asking me what my system is—how I figure out how much to pay people—I haven't got one," a typical CEO admits. He reads; he knows what "tax gimmicks" are out there. He also keeps pretty close tabs on what the competition is paying. But he never seems to get around to designing a plan that is tailored to meet the goals he has for himself and his company. When business is good, there is no time. When it is bad, there is no money.

So, he sticks with the basics—salary, bonus, a sales incentive for the marketing guy, and the usual slate of benefits and perquisites. When annual reviews roll around, he goes on his guts.

"We're not doing much," he says, summing up. "But I'm sure we're not doing any less than what other companies are doing." A nervous pause. "Are we?"

A good executive-compensation package is a coordinated system of financial rewards that is designed to advance a corporate strategy. It is a collection of direct and indirect forms of remuneration, ranging from a simple paycheck to a variety of sophisticated capital-accumulation and equity-participation vehicles. Some are intended to reward; others to motivate.

The contents of the package—the things a company is "doing" for its executives—should depend on three things: what is happening in the job market, what the company's short- and long-term goals are, and which compensation vehicle will be most compatible with the corporate culture of the organization. Then there is the matter of tax-effectiveness—finding those modes of compensation that maximize both what the company is spending and what the executive is pocketing, while still keeping everyone out of trouble with the Internal Revenue Service.

Yet designing all of this requires a planning effort that many small companies are loath to put forth for a document that typically affects far fewer than a dozen people. Besides, it is such a ticklish matter, this business of trying to put price tags on people. Many corporate decision-makers would rather try to get by without any policies, at least for a while.

There really is no such thing as going "without policies," though. Even in the absence of a written plan, precedents are set, policies are developed, and the resulting de facto executive-compensation system works to shape the company's future. The question that executives should be asking themselves is: Are these the right policies for this stage of the company's growth? Is this the plan that will get the company where it wants to be?

The results of the INC. survey provide a snapshot of the packages that have been adopted by companies of various sizes, industries, and geographic locations. But the real story is behind the numbers—in where these companies have been, where they hope to go, and how their executive-compensation policies will, or will not, help them get there.

Research assistance for this article was provided by Joshua Hyatt.

Survey profiles: The Chief Executive Officer

Total compensation	$71,797
Base salary	$59,152
Percent receiving bonus	52%
Bonus, as percent of base salary	38%
Percent change in total compensation	25%
Age	45
Years in position	8
Years with company	11
Founder	67%
Board member	89%
Stockholder	92%
Average equity position	65%

The Company

Net sales	$4,553,418
Net income before taxes	$308,490
Total payroll	$841,148
Number of employees	37

THE "PAY-FOR-PERFORMANCE" TREND

Designing an executive-compensation plan, for many companies, has been viewed strictly as a matter of keeping up with the Joneses. If the competition raises salaries, then it is time to hike the payroll. If one company lengthens its list of perquisites or improves its health-care coverage, then the others feel obliged to do the same.

But it is seldom that simple anymore. Increasingly, companies are finding that they need to factor into their compensation decisions a variety of internal operating-strategy considerations that have little or nothing to do with what the competition is doing: such objective matters as cash flow, growth rates, and profit requirements. What the other guy is doing next door is still important—it just may not be as important as what is going on in one's own backyard.

The economy has had a lot to do with the change. After two crippling recessions, business is good—the current revenue and profit projections from the INC. survey are, in fact, stunningly optimistic. Some 90% of the respondents are anticipating sales increases averaging 43%, and 83% expect that boost to be reflected in a 69% jump in pretax profitability. But, consultants say, the lessons of austerity learned during the downturns haven't been forgotten.

"I think there have been some fundamental shifts in the way we conduct business in the United States," says Jerrold Bratkovich, a partner and general manager of the Los Angeles office of Hay Management Consultants. "We're going to see some significant changes in, and a longer term focusing on, a relationship between pay and performance that hasn't existed previously. My only fear is that the turnaround will be too good, too soon, and we'll fall back into the same traps."

For younger, faster-growing companies, this pay-for-performance thrust has meant shifting the emphasis from salaries and benefits to bonuses and incentives. The latter two are methods that don't increase fixed costs and, therefore, leave the company more flexible in times of economic downturn—which more than a few businesspeople are dourly predicting will return after the Presidential election, when Congress takes up the work of reducing the federal deficit.

For many older organizations, however, the switch isn't made so easily. Nearly 25% of the respondents to INC.'s survey are companies that were founded before 1958, and many have had to devise their own methods of meshing the new financial realities with their established ways of doing business. They may still be using salary increases as the chief means of improving the compensation package—as 72% of the survey respondents do—but more than a third report that they are moving away from discretionary raises and toward a more merit-based system. Take, for example, the case of a 60-year-old, $30-million telecommunications company on the East Coast that is still floundering for market share following the American Telephone & Telegraph breakup.

"We're expecting a down year," says the company's chief financial officer, "so we're playing our dollars in cash salary, because we don't expect there's going to be much to spread around. See, I've always paid a bonus at the end of the year, good years and bad—so I'll have to do that again. I probably won't increase employee benefits this year, because that's getting far too expensive a way of compensating people. So by elimination, it'll all go to salary, and in straight increments. I won't be lenient, though. Not everybody's going to get a raise."

Sweetening the pot: What companies did to improve compensation

Salary increases	72%
Additional benefits/ perquisites	39%
New annual-incentive plan	25%
New long-term incentive plan	14%
Special recognition/ awards	13%
Other	9%

Note: Total exceeds 100% because of multiple responses.

The focus, in other words, is on ways of assuring that the company gets what is sometimes referred to as a return on compensation. "Just coming to work and continuing to draw breath doesn't warrant a 10% annual increase anymore," says Peter T. Chingos, a partner at the accounting and management consulting firm of Peat, Marwick, Mitchell & Co. Across-the-board salary increases and discretionary bonuses are giving way, he says, to any of a number of bonus formulas and incentive structures, and salary increases are based less on established ranges than the achievement of certain individual or companywide performance goals.

Many of the executives polled for this year's INC. survey seem to have embraced the pay-for-performance concept. Incentives are gaining favor: 25% of the respondents say that one of the steps they took to improve their compensation package was to add an annual-incentive program, and 14% listed the introduction of a long-term incentive. Bonuses are paid to executives of 81% of the respondents, and, while about half of the companies still set both the size of the pool and the individual allocations on a discretionary basis, 49% of them say they now use a formula to establish the bonus pool. Well over half list sales goals, profit goals, and other benchmarks as the means by which individual bonuses are set.

Consultants who have reviewed these figures find them heartening, but surprising. "I just haven't known of many small companies that have instituted performance-oriented incentive programs," says Chingos. "I keep looking at the surveys to see if there's been a mistake in tabulating those figures, or whether [the respondents] could have misunderstood the question." He says neither is likely—which makes the numbers all the more intriguing.

William James, the partner in charge of compensation services for the consulting firm of Hewitt Associates in Lincolnshire, Ill., suspects there may be some exaggeration or wishful thinking at work here. "There's a lot of lip service paid to all of this—particularly in the area of salaries. Smaller companies that have been very informal in the past are coming to grips with the need to put more structure into the program. They want the tools that the bigger companies have had for a long time. But I'd have to say there are very few pay-for-performance programs that actually have teeth in them. You just don't hear about that many employees not getting their [salary] increases."

Edward Redling, president of Executive Compensation Service Inc., a subsidiary of The Wyatt Co., agrees. "They talk about pay-for-performance as if it were motherhood and apple pie, but when it comes down to it, a lot of managers aren't tough enough to step up to the hard decision—to tell that executive he's not getting what he thought he was getting."

There are exceptions, of course. Emmett Pace, owner and president of Oceana Corp., a 22-employee, $10-million-plus steel distributor in Darlington, S.C., is a good example. Not only has he turned down executives for annual bonuses "two or three times" when he felt they were "slackening off totally," he has also been known to deny himself a bonus. "I didn't think I did a good enough job last year," he says, matter-of-factly. "We were not as profitable as we should have been."

But Charles Vranich, vice-president and general manager of Childers Carports & Structures Inc., in Houston, says it is not only lack of gumption that prevents executives from installing pay-for-performance structures—it is a matter of survival. He and his partners, for example, had wanted from the beginning of the now 20-employee, $3-million manufacturing operation to establish a merit structure for their bonuses. Vranich was particularly keen on it, having worked for a large company that handed out lump-sum bonuses quarterly. "Everybody looked at it as just part of the salary," he says. "The first time the company had a bad quarter and the bonuses didn't come, you'd have thought someone died around there." But, when it came to imposing a different set of rules in his own company, it just didn't seem financially feasible to do anything but leave them discretionary. Revenue was fluctuating too wildly. "If we'd have set bonuses as a percent of income, we'd have strapped the company."

While there are many companies that readily acknowledge the efficacy of imposing more structure on their compensation systems, there are also as many that steadfastly maintain that there is no need—in fact, no *place*—for salary ranges, bonus formulas, and incentive plans in small business. At least not in *their* small business.

"It becomes a game of numbers," says Philip W. Nace, founder and CEO of Nachem Inc., a Braintree, Mass., chemicals manufacturer. "If you devise an incentive plan that is strictly tied to performance against sales projections, the plan's going to be faulty to begin with. Remuneration is based on how much you go over budget, right? So, people lowball the estimates—there's no way to get around it." What's more, he says, the plans tend to discourage enterprise—whether the projections are met or not. "Once they've met them, they quit working. And if there's a downturn in the economy, and they know they're not going to get the incentive, you can bet they're not going to work."

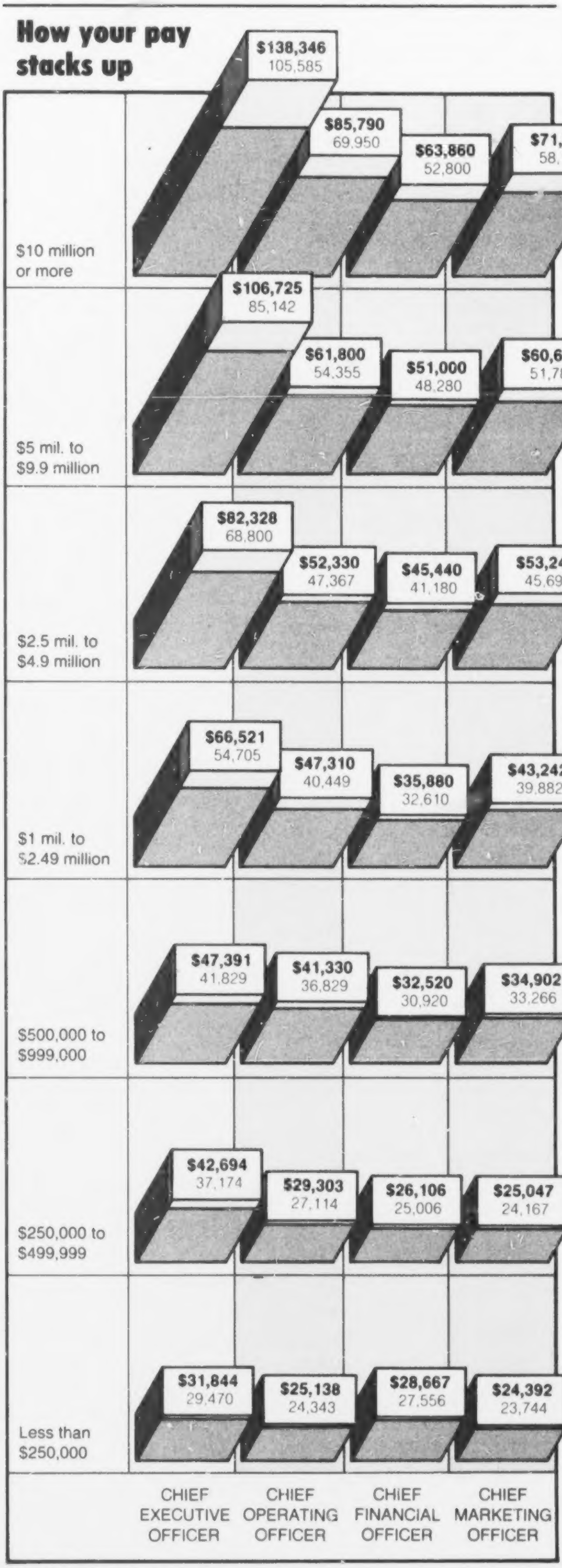
"Maybe we're just too lazy to start measuring performance," says Edmund Taylor, CEO of Gas Inc., a 58-employee, $10-million propane-marketing company in Union City, Ga. He used to pay "pure, reach-up-in-the-sky-and-grab-it-down bonuses that either you earn or you don't," but gave it up, recognizing that they weren't motivating his employees. Believing that "nothing motivates like getting paid on Friday and having job security," he put all of the would-be bonus money into salaries. It may not be the most scientifically designed compensation system, he says, but it is honest: "Now we pay what the job is really worth, rather than underpaying [the employees] a little bit and then giving them a big fat check at the end of the year."

Michael Keyes, too, rebels against management-by-mathematics. "With 26 employees, I just don't see that you have to be that structured," says the president and co-owner of Amsure Associates Inc., an $8.5-million insurance agency in Albany, N.Y. His bonus system, for example, has no ceiling, and no set pattern of size or frequency. "It's not that we're not goal-oriented; we just don't see the need to be so sophisticated, with bar graphs and bell curves. Any business under 50 employees is really run like a family. It *has* to be."

The owners and executives of small, closely held companies tend to have managerial environments that are indeed familylike, consultants say—usually with one person at the top who is either very paternalistic or egalitarian in managerial style. While the two styles are widely divergent in many smaller ways, they are the same in one broad respect: In both cases, there is a reluctance to distinguish among employees on the basis of performance. The CEO-owners see all underlings either as children or as equals. They tend to see corporate progress as a team effort, even when there are some individuals who deserve more recognition than others. And they don't believe they need graph paper to figure out what is going on within their four walls.

"In a small company, the owners are the managers—or they know the managers directly," says John McMillan, vice-president and director of compensation services with A. S. Hansen Inc., of Lake Bluff, Ill., "so they feel very competent in making equitable and fair reward decisions."

Often, company performance and individual performance are seen as one and the same. This is particularly common in service-oriented companies, in which the efforts of people are the products of the company, but it is also true in very small manufacturing operations. At Saugerties Packaging Corp., a 25-employee, $3.6-million manufacturer of paper wrappers in Saugerties, N.Y.,



Charts by Bruce Sanders

"everybody gets a bonus," says CEO Peter Garlock. "They run about 10% of salary, but they're based on profits, not performance. Everybody performs to their optimum every year, we feel."

And if they don't perform, they are likely to find themselves jobless. "If you can't give somebody a raise, then it's probably time to part ways," says Allen Guggenheim, president and chairman of Information Management International Inc., a 225-employee, $11.5-million maker of data-processing systems and software in San Jose, Calif. "It isn't easy, but when you're at that point, you should probably make it comfortable for them to leave."

But the fact of the matter is that in a small, closely held company with just a handful of executives, friendships and alliances develop that prevent the ouster of all but the worst managers. What's more, their compensation packages often continue to march upward in value at the same rate as that of their more productive co-workers. The long-term result, consultants say, is apt to be an overgrown management layer, where additional people have been hired above or below those who aren't measuring up. It is costly, and it can create problems.

Companies now find that they need to factor into their compensation decisions a variety of internal operating strategy considerations that have little or nothing to do with what the competition is paying.

"When I first came here three years ago, as a consultant, there was a sense of inequity among the executives," recalls Jim Hillgren, vice-president for human resources at Intecom Inc., a $120-million telecommunications-switch manufacturing company in Dallas that has grown at an 80% to 100% rate per year since that time. "Salaries, bonuses, and benefits were being determined arbitrarily, and some of the folks who hadn't grown as fast as the company found themselves in positions with less responsibility, but still getting the executive package. There was a sense of a lack of direction as to how people were being rewarded."

Since then, Intecom has gone on an ambitious structuring campaign—so ambitious, in fact, that Hillgren has found he has had to break rules almost as fast as he has made them. "We've probably tried to be too definitive," he says, "too attached to too-well-defined goals.

"There is a desire sometimes to make structure work for you, I think, instead of the skills of management. You rely too heavily on it, and the more structure you impose, the more you seem to have to tailor around it."

The trick to designing the best executive-compensation system for your company, says Peat Marwick's Chingos, is to strike a balance between too much discretion and too little. "You can't get by with one performance standard for the entire company, and you can't get carried away and devise so many structures that departments end up working against one another. There has to be a mixture."

He also advises meshing short-term thinking with longer-term strategic plans, with an eye toward linking compensation programs to a set of corporate goals, be they financial or cultural. But the most important thing, he says, is to "do what's right for you." Just because other companies are tilting toward certain kinds of capital-accumulation devices or incentive techniques doesn't mean either option is right for your company. "There's a tendency to look for cookbook solutions," Chingos says, summing up, "and it's just not that simple. There really are no cookbook solutions."

OFFERS THEY CAN'T REFUSE

It's always 32 for 32," groans David Corbett, vice-president/partner of Korn Ferry International, an executive-search firm based in Los Angeles. "Small companies are always asking me to find them a young tiger of 32 who'll come to work for $32,000." Either they haven't priced MBAs lately, he says, or they have an inflated notion of their company's attractiveness to job-seekers. He suspects the latter.

"They're entrepreneurs in heat. They're building a company, and having a lot of fun doing it, so they think all the hotshots naturally want to work for them." Corbett laughs ruefully. "They don't realize there are 10 other companies that want that same guy." And many of them, particularly the larger ones, he says, may be offering far better deals.

The success or failure of a small, growing company depends in no small measure on its ability to attract *and* retain good executive talent. Even companies that are committed to promoting from within sometimes find themselves chasing executives from other, often larger, corporations with better-structured compensation plans. Yet, many of these smaller companies seem to operate on the assumption that they can recruit the talent without offering a generous, tax-effective—in other words, *competitive*—combination of direct and indirect compensation.

"I believe in doing only what I feel I can comfortably do for my employees," says the CEO of a southern steel distributing company. "I can't worry about what other companies are doing. Of course, if they took all my people, then I'd have to start worrying." But that isn't likely to happen, he says, because "this is a great place to work."

"You don't need to put together as fancy a package when you're offering people the opportunity to work in an entrepreneurial environment," agrees an East Coast furnishings supplier. "Give them what they can't get at a larger company—responsibility and a chance to affect some of the decisions, mainly—and they're happy."

There's certainly truth in that, says John Cooke, founder of The London Group Inc., a Spring Lake, N.J., management consulting firm. "You see almost a Svengali-like influence on those who work for an entrepreneur," he explains. There are indeed second-tier executives who gladly accept the unstructured, reactive policies of the smaller company—policies that are generally set and shaped not by the employment market, but by what is best for the entrepreneur—just to be free of the larger corporate structure they knew before. But, as many companies are learning, there are also quite a few other good prospects who, while tantalized by the opportunity to work for a young, growing company, just can't bring themselves to make the sacrifice.

"They participate in a variety of short- and long-term incentive plans, not to mention capital accumulation, supplemental retirement, deferred compensation, and everything else," says Peat Marwick's Peter Chingos. "So, if you want an executive from a larger company, you've got to first make that person whole [match the prospect's current compensation package], and then make it interesting on top of that." And that is no mean task for a lot of small companies, Chingos says, because designing an attractive compensation package often requires the use of techniques and vehicles that small organizations can't—or won't—put on the table.

Because they are often cash-poor, small companies on a recruiting job simply may not have the option of paying huge salaries. Nor can companies simply dangle a long list of perks. They have come to be gun-shy in that area, since Congress and the IRS have been cracking down on cars, clubs, and the other goodies that once were the favored tools of small companies seeking to maximize their executives' income.

And many CEOs dislike offering a beefed-up benefits plan for executives, because benefits represent costs that are at once too fixed and too difficult to control. Flexible-benefits plans can be more effective, maximizing the benefit to the executive while at the same time capping the total expenditure. But only 10% of the companies that reponded to the INC. survey are taking advantage of these plans. Consultants attribute the disinterest to widespread confusion over how such plans work, and, as of this spring, stricter IRS policies regarding them.

Deferred-compensation options are painless enough; in fact, they give a corporation added working capital during the deferral period. But they tend to be unpopular with would-be new hires. How can the executives be sure their company will be around in three years, or five years, whenever they might want to take the cash? If the company should go under, they would be waiting in line for their pay, along with every other unsecured creditor.

Small companies often forget, says Hay Management's Jerrold Bratkovich, that leaving a large organization for a small one can look like a risky proposition. "To attract and hold good people, you've got to offer an upside that compensates for the downside," he says. "You've got to balance risk with reward." It takes a willingness to tailor individual compensation packages—not to mention some creative negotiating skills.

Michael Whalen can vouch for that. As owner and founder of The Cheese & Specialty Foods Co., a 35-employee, $11-million operation in Denver, he recently went through an "exhaustive" search for a vice-president of marketing and sales. He eventually nabbed one, a 15-year veteran of competitor Nobel/Sysco Food Services Co., but it took a highly lucrative compensation package to pry the man loose. The terms are these: a salary of $65,000 a year (more than Whalen himself is taking in direct compensation) plus a deferrable bonus that is tied to certain annually set goals in the areas of gross margins and return on assets. And the clincher is this: The new vice-president will get equity, after certain retained earnings goals have been met.

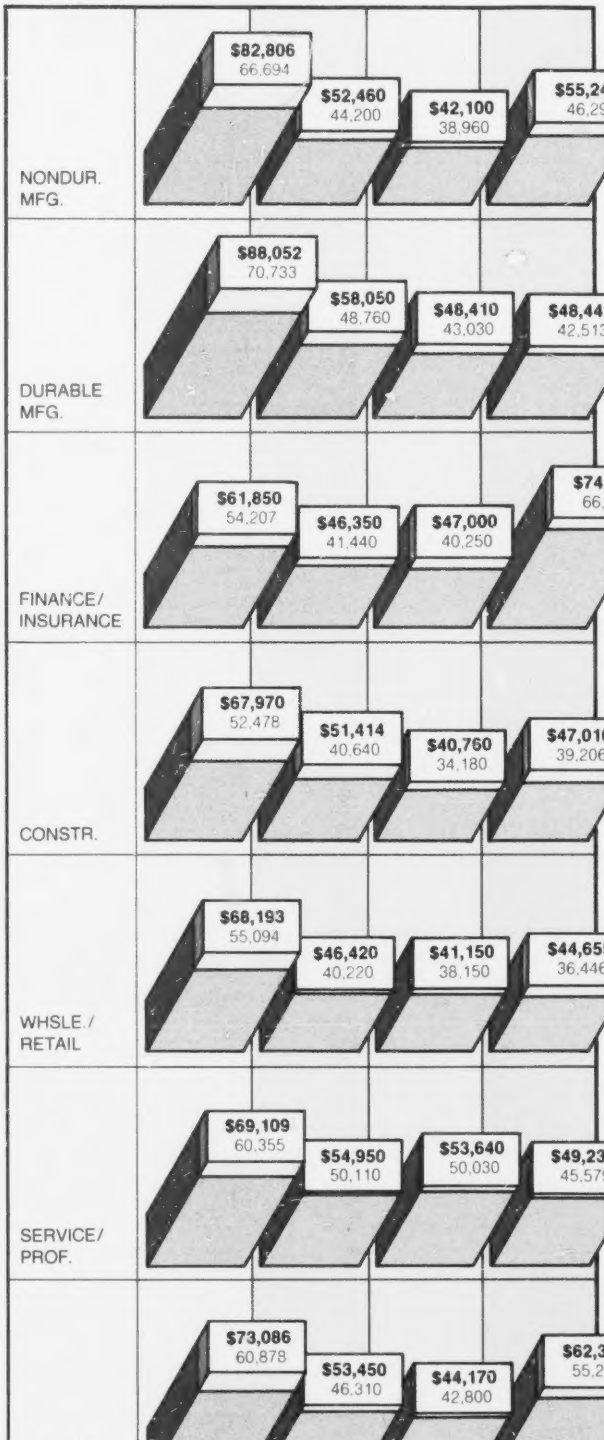
"I want to surround myself with better people," says Whalen, explaining his generosity. "I don't care if the vice-president is making more money than I am, if he can do what he says he's able to do." But salary and bonus alone probably wouldn't have been enough to grab this candidate or any of the large-company candidates Whalen interviewed. He found that they want the one thing small-company executives are least willing to part with: equity. "They want to be the conductor, and if they don't see the baton, they don't want to negotiate."

"When companies find a good candidate nowadays, you've got to start from scratch," explains Corbett, the recruiter. "You've got to talk about what the candidate wants, what the spouse wants, even what the kids want." As a result, he says, you do hear about equity and equitylike vehicles that give the candidate a feeling of participation. You hear of $2-million and $3-million companies offering salaries of $30,000 to executives—sweetened with $100,000 bonus opportunities. You also hear about one-time, front-end bonuses, signing inducements such as mortgage differentials, generous allowances for a spouse's job search, or agreements to provide education for a special-needs child. "All the old rules have gone out the window," he says.

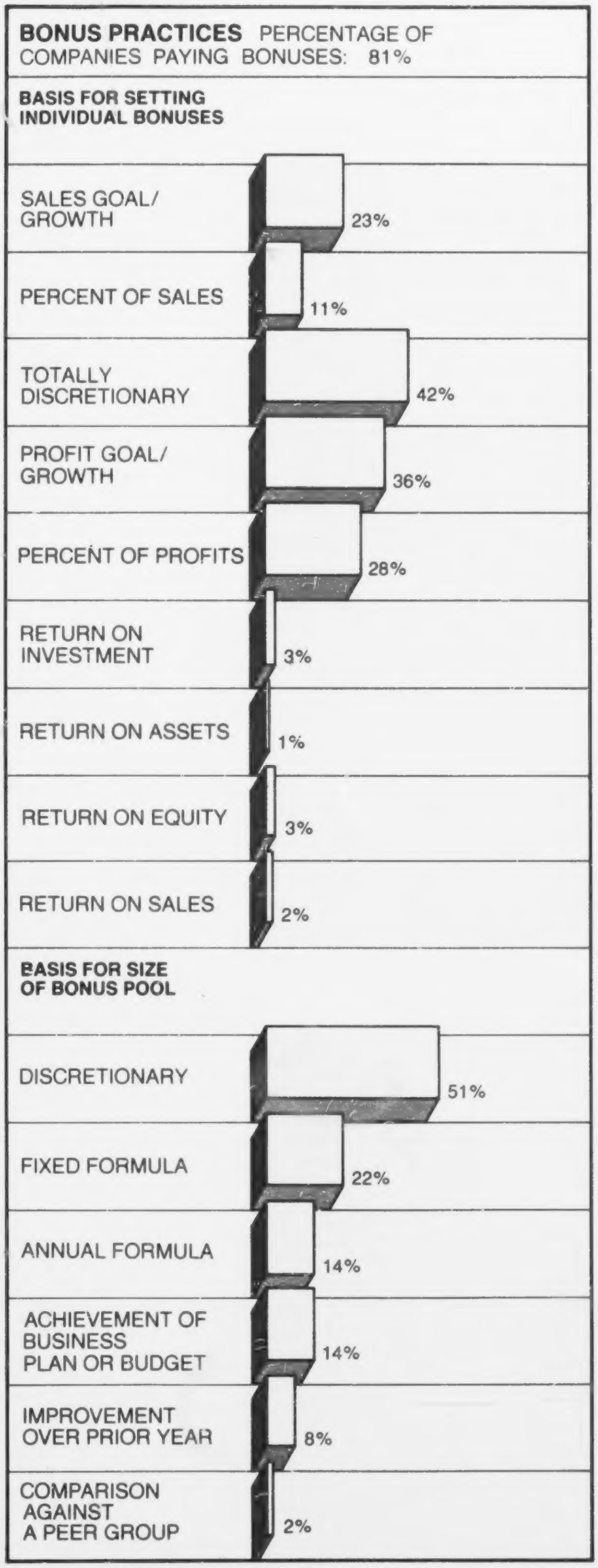
But what happens once that prized executive comes aboard or is brought up through the ranks to a senior position? Again, there is a tendency for chief executives to overemphasize the sheer challenge of growing a company as compensation in and of itself. CEO-owners have been known to sit on salary increases and balk at installing the devices that allow executives to pocket more income with lower taxes—and sometimes for quirky reasons.

"Our previous leadership didn't believe in this so-called tax gimmickry," says Terry Blakely, controller of Universal Steel Co. of Michigan, a 70-employee, $15-million distributor in Lansing. "They were unusual, in that they felt a certain pride in seeing themselves and their employees paying all the tax they could pay. They didn't care much for the little angles against the income tax system, so they never took into account how to get more money

How your pay stacks up—by industry



Slicing up the profit pie



Total Exceeds 100% Because of Multiple Responses

to the employees. Now, long-term disability, supplemental life, deferred bonuses—these are ridiculous things to lose a person for, especially when you know it's going to take several years to really replace somebody. But they didn't seem to see that. They paid you your salary, and that was it."

Sometimes, consultants say, that salary seems inexplicably frozen. And when that is the case, there is usually a CEO-owner in the background, who—unlike Cheese & Specialty Foods's Whalen—is feeling a bit crowded by the compensation he or she is shelling out to the rest of the top team.

"Many of these guys are grossly underpaying themselves," says Wyatt consultant Ed Redling, "so they hold everybody else's compensation down." They forget, he says, that they hold equity. All they remember is the figure on the stub of the paycheck, and if somebody else's numbers are getting too close, it is admittedly hard to take. "I can't see somebody else earning more than I do," says Edwin J. Snyder, of E. J. Snyder Inc., a $2-million Baltimore mechanical-construction contractor. "If they did, I'd do what they do."

The CEO can sometimes be convinced to pay his subordinates better, but Redling usually approaches the problem from the opposite direction. "I've had to convince several [CEOs of small, privately held companies] to take significantly more—whether it's salary and bonus or whatever. Just move his total comp up so he could pay his second line much more effectively, much more appropriately."

If there is one executive that the CEO-owner of a growing company almost always takes good care of, however, it is the chief marketing officer. "The typical entrepreneur in a young, small company will compensate people in relationship to his product market," explains consultant Cooke. "And in the growth stage, sales are everything. Salesmen, in fact, are often paid disproportionately just because the entrepreneur needs them so much." The INC. survey shows that while chief marketing officers are less likely than the other members of the executive team to receive stock and/or board positions, they are often paid more direct compensation than some of their colleagues. For example, the average CMO gets a higher salary, and—in bonus-paying companies—receives a bigger annual increase as a percentage of base pay than the average chief financial officer.

"Marketing is everything right now," says Michael Drake, CEO and part-owner of Brell Mar Products Inc., of Jackson, Miss., explaining why he recently gave his chief marketing officer stock in the $1-million company, which makes hunting and marine accessories. "I can't afford to lose my guy, so I've got to find out what turns him on, and give him that. Within reason, of course."

Traditionally, the same has not been true for executives in engineering or research-and-development posts. Technical people, in fact, are frequently the last considered for improved compensation packages. That situation, says Bratkovich, is unfortunate and downright wrongheaded. "Talking about executive compensation without including your key technical talent—you just can't do it. It is, after all, in its purest sense an asset-management, risk-management kind of thing. You have certain human-resources assets, and to the degree that those assets are critical to long-term survival, you build insurance programs, if you will, to protect those assets."

Corbett says a key part of that asset protection involves recognizing that the entrepreneurial bent that first attracts candidates to a start-up can also encourage them to strike out on their own someday. Many an entrepreneur has scoffed at the idea of designing compensation vehicles to deter such defections.

"I have a feeling," he asserts, "that compensation packages that orient themselves around that issue—that give the executive more recognition, more opportunity for freedom—are the packages that are going to be most successful in attracting and retaining executives."

CREATIVE COMPENSATION

They like to think of their companies as creative, innovative organizations, blazing paths that larger companies can't or won't travel. But, when executives of small, closely held companies start to critique their own compensation policies, high on their list of defects is just that: a lack of creativity. And many are of the opinion that they could spark more innovation by paying better attention to how larger companies are confronting compensation issues.

"Tapping into what the big guys are doing—that's how you find out what vehicles are out there, and how you can plug them into your operation," says the CEO and co-owner of an Ohio construction-contracting company. "There's where the ideas come from." He is fascinated by the latest capital-accumulation plans, and, until the IRS declared "invalid" some versions of them, flexible-benefits options had looked good to him, too. So, as this CEO looks to enlarging his board of directors, one of his priorities will be to find at least one person who can keep him informed of such innovations, and offer advice as to their application in his organization.

Some consultants say that smaller companies have an inferiority complex: They assume that larger organizations are the only ones that are capable of innovative executive compensation packages.

Consultants, however, suspect that there is an inferiority complex at work here—one that causes small-company executives to overlook the freedom they have to devise new compensation vehicles and policies specifically attuned to their own needs. "Smaller companies shouldn't be waiting for the larger companies," says consultant Edward Redling, of Wyatt's Executive Compensation Service. "They have a great opportunity to innovate on their own, because in a small company, everybody knows everybody. They can get things done outside of the bureaucratic process, which tends to institutionalize compensation policymaking in larger companies."

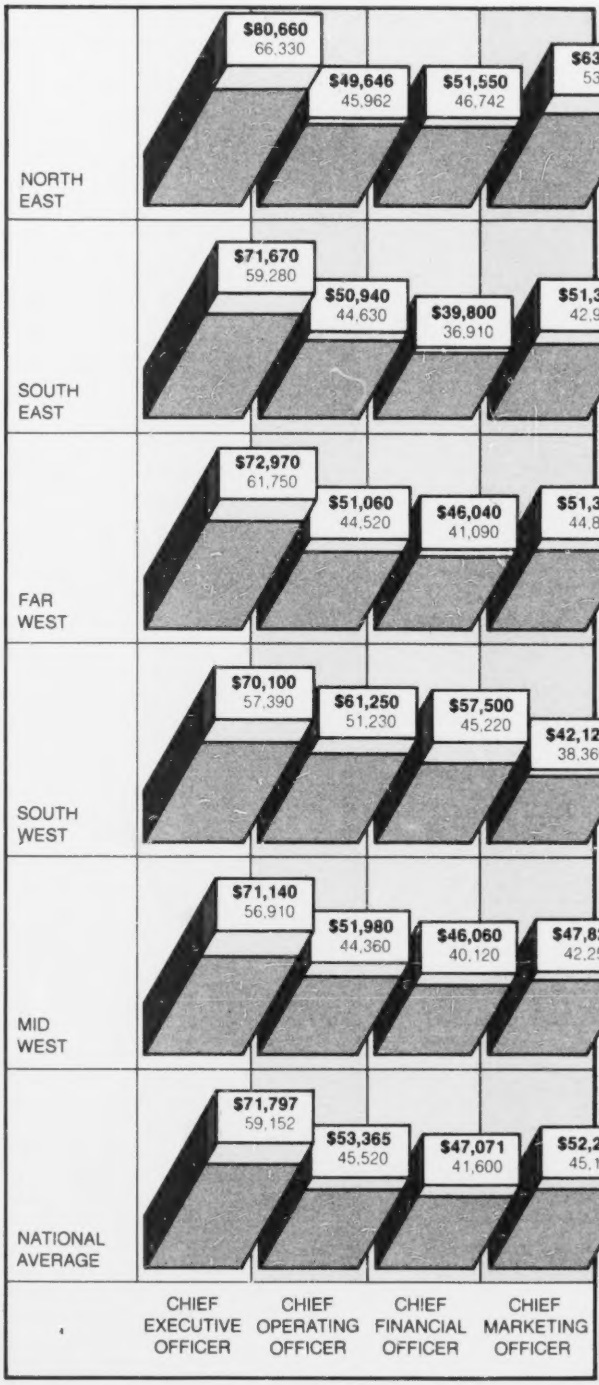
Large companies haven't exactly proven to be role models when it comes to dealing with change. They haven't been any more adept than their smaller counterparts at dealing with some of the more pressing compensation issues of the decade: such issues as how to create challenging promotions for people who don't care to ascend just to the next managerial level, or how to individualize packages for executives whose job descriptions and production habits defy nine-to-five, annual-review parameters. What's more, Redling says, the most effective compensation packages are those not merely discovered and "plugged in." Rather, they are developed or tailored to shape and reflect the individuality of the organization.

Hay Management's Jerrold Bratkovich agrees. In a more perfect world, he says, executive-compensation decisions would not be made strictly with finances, in-house politics, and the competition in mind. "I think the most important question that small-company executives can ask themselves is, Does our reward system support the kind of behavior we want from this organization—the kind of culture we want to develop here? And, if not, how do we restructure it? It shouldn't be, What are the large companies doing? It should be, What can we do differently for ourselves? What can we do that's best for our stage of development and our kind of people?"

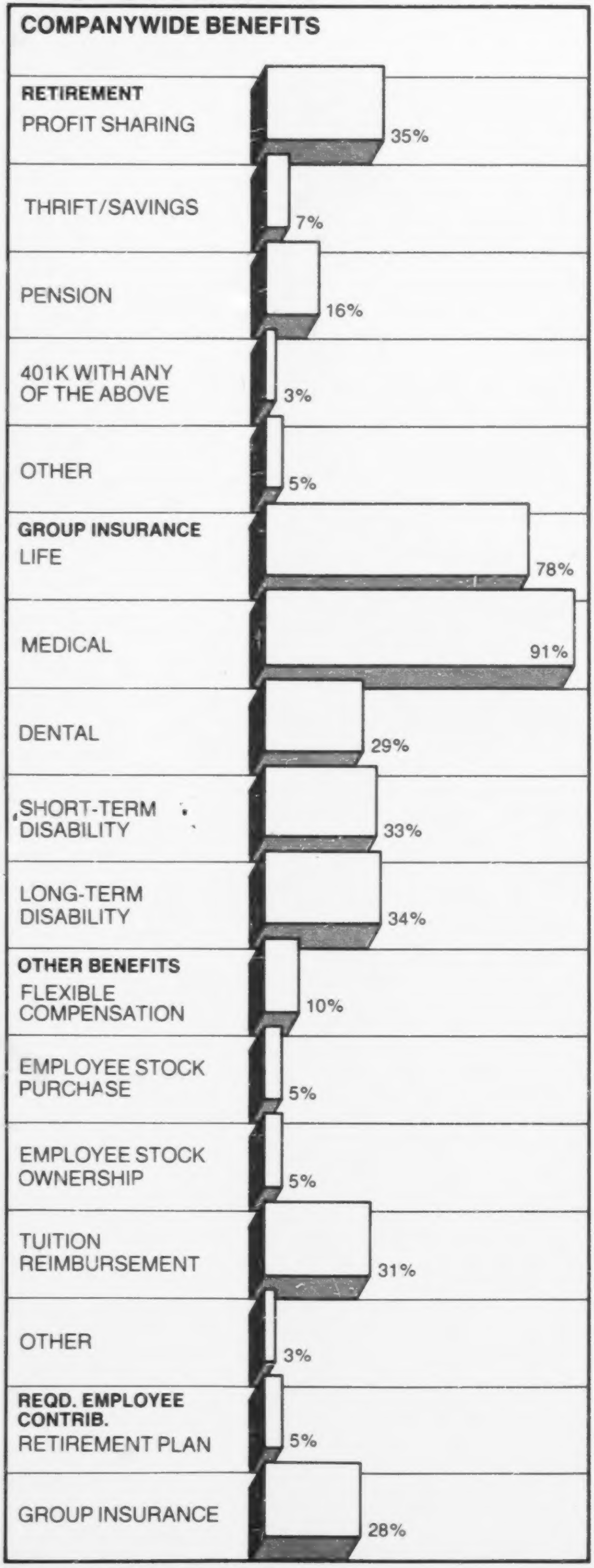
Some companies, for example, are seeking to devise criteria for recognition programs that are more like achievement awards than hard-number performance incentives. Others have noted that they can get four times the psychological benefit from their bonus plans simply by paying them out in quarterly distributions. But not all of the self-examination that Bratkovich favors has to do merely with which compensation vehicle, or which compensation policy, works best. Gradually, companies are coming to realize that they can—and often inadvertently do—make corporate-culture statements in their design of a compensation package. Here and there, executives are recognizing what those statements are—and either they are capitalizing on them, or are designing them out.

(continued)

How your pay stacks up—by region



On the fringes: companywide benefits



Total Exceeds 100% Because of Multiple Responses

One of the more interesting trends Bratkovich has noticed is a tendency among high-growth, high-tech companies—particularly on the West Coast—to veer away from status perks. "Clubs, cars, first-class air travel—many of them won't touch any of those perquisites with a 10-foot pole," he says. "They distinguish between people too much. They want their people to work together, survive together, and grow together."

Data I/O Corp., a computer-component programmer manufacturer in Redmond, Wash., is one example. The 500-employee, $36-million company has adopted a series of executive-compensation policies designed to draw as few lines as possible between employees of various levels. There are company cars for some managers, but no assigned parking spots. There are bonuses, but they aren't discretionary; they are based on a formula related to pay grade. There are stock options, but the criteria for allocation is open for all to see and strive toward.

"We have lots of engineers here," explains Pamela Alexandra, Data I/O's manager of compensation and benefits, "and their education makes them very rational and very egalitarian. They like to be in the kind of atmosphere where everybody is treated fairly, and having a lot of perks doesn't give that impression." By making what perks there are open and apparently attainable, Alexandra maintains, Data I/O has prevented walls from developing between different layers of personnel and threatening the team atmosphere the company has tried to foster. In fact, the company has chosen to literally tear down what few walls there are within the plant. "We don't want to have a business where people hide in their glass offices and never mingle," asserts Alexandra.

On the other hand, there is the example of a 1,000-employee, $50-million conference-center operator that has instituted policies that have had the effect of separating the top brass even more from the rest of the managerial work force.

With the goal of better compensation for his most valued executives, the CEO-owner devised a special cash incentive, payable to only 6 of his 25 top managers. He did it through the establishment of an S corporation (formerly called a Subchapter-S corporation)—a management-company subsidiary that, on paper at least, sells services to the parent organization. Its "profits" provide cash payments that, unlike equity—the value of which can fluctuate with sales and earnings—remain dependably lucrative over time. Some executives, in fact, are doubling their salaries through the plan.

The company's CEO-owner believes that there is sound reasoning behind his decision to reward so richly so few. "My feeling is that the top 6 employees have an enormous impact on the other 994, so that's where I put my emphasis. Funds are not unlimited, you know." He also defends his not-inconsiderable efforts to keep the existence of the plan under wraps. "Everybody wants to be a vice-president anyway," he explains. "Describing the economic elements of that position would only accelerate the interest. There's no benefit for me to try to motivate in that way, and, frankly, I'm convinced that compensation knowledge can be a demotivator."

This CEO-owner bases his conclusion on a conversation he had with his chief financial officer shortly after the S corporation was formed. The CFO, a most-trusted employee, was insistent that he know how his cut of the spoils compared with those of his colleagues.

"I always thought the comparisons went on only at the lower echelons," the CEO-owner says. He found it "a real eye-opener" that a man so high on the corporate heap would be brooding over such an issue. So, perhaps he can't be accused of creating a work atmosphere that is predicated on openness and egalitarianism, but, "it *is* dedicated to harmony," declares the CEO-owner. "From what I've seen, public knowledge of compensation information simply doesn't create harmony."

EQUITY, THE SECRET WEAPON

Gus Constantino would sooner sell out than offer his executives stock in his company. He relishes the flexibility, the discretion—the control—that comes with being CEO and sole owner of $3.5-million Wilson Feed Co., in Richmond, Va. "I'm a hard person when it comes to sharing all of this," he says. Stockholders are stockholders, he reasons—whether they hold 8% or 80%—"and when you give them any piece of the company at all, they automatically think they deserve some authority." To his way of thinking, Constantino says, running his feed, seed, fertilizer, and chemical distribution business is a solo act, and he is not about to do anything that would let his employees upstage him. "Either I'm the show, or I'm not the show," he shrugs.

But the pressure is on to share the spotlight. Ownership, and the right to participate in the growth of a company, has rather suddenly become something that many senior executives desire—if not demand. They have seen the risks and rewards of entrepreneurship, and they want to experience them for themselves. They have watched as companies have gone public in record numbers—there were close to 1,000 initial public offerings in 1983 alone—and they have seen their bosses, the founders, get rich. If they have devoted the time, the energy, and the talent to make a risky venture a success, they figure they have earned the right to share in the pride—and the payoff.

Consultants agree, giving glowing accounts of how much more motivated, how much more "team-oriented" executives become when they have a personal, financial stake in the company's future. Whether the game is attracting, developing, or motivating executives—or trying to foster a certain corporate culture—equity is the trump card that small, growing organizations hold against larger competitors. And deciding whether or not to play that card is becoming an increasingly inescapable part of designing a compensation package.

At first glance, equity wouldn't seem to be much of an issue for the overwhelmingly private, closely held companies that dominate this year's INC. survey. The average company's stock is 86% internally held, and while the vast majority of it is held by the CEO-owner, a quick perusal of the executives in other positions shows that about half of them own stock, and that the average equity position runs as high as 26%. Many of these shareholders, however, are co-founders. Rare is the company that is using equity as a long-term incentive for other executives. A mere 9% report having a stock-option plan, and other equity or equitylike vehicles—such as nonqualified stock, stock grants, and phantom-stock plans—come in at 2% or less. Eighty-five percent of the respondents report having no long-term incentives at all.

Many owners have a difficult time seeing equity as a compensation tool; to them, it is a highly charged, emotional issue. Their business is just that—*their* business—and they are extremely reluctant to give up any part of it. The personal and economic sacrifices they, and their families, made to get the company off the ground are just too fresh in their minds.

"When you give up equity, you're giving up quite a bit of profit and capital appreciation," explains Gerald Frank, chief executive officer of Greenacres Gypsum & Lime Inc., in Spokane, Wash. He and his five co-owners have discussed giving stock to some of the company's up-and-coming managers, and so far, they have chosen not to. After several years of struggle, "we have a very profitable company," Frank says of the $2-million nonmetallic-mineral-processing operation, "and all of the stockholders feel as I do—it's just too *good* right now."

Long-term incentives: The stock answer—no

None	85%
Incentive stock option	9%
Nonqualified stock	2%
Stock grant	2%
Phantom stock	1%
Other	2%

Note: Total exceeds 100% because of multiple responses.

"It's basic greed," says Robert Kramer, vice-president and partner of Brookdale Plastics Inc., a $1-million manufacturer of thermal-formed plastic in Minneapolis. "People who are reluctant to give away equity are people who don't feel they have enough money."

Not that Kramer doesn't understand the syndrome. Only a year ago, he and his partner were "brown-bagging it, sharing leg space under a desk," and drawing no salary whatsoever. "When you're in that survival stage, the last thing you want to talk about is giving away profits—especially when there are barely enough to feed the company. But I think that when you get to the growth stage, if you sit down and analyze it, you can see the benefits." He and his partner, in fact, have considered giving equity to a new member of the executive team. Why? "You just have to presume a guy will take better care of his own company than he would someone else's."

Paradoxically, that is exactly what many CEO-owners fear most: The new stockholders might ask too many questions, offer too many opinions—expect too much power.

"It's kind of a phobia with many entrepreneurs—a crack-in-the-dam sort of thing," says Jerrold Bratkovich of Hay Management. "Giving up 10% of the company isn't going to make one iota's difference in their ability to make decisions or run their companies. But they figure if they give up even that much stock, pretty soon they'll only have 49%. So they are very unwilling to give up any at all."

Some owners, having become convinced of the merits of sharing equity, but not of their ability to retain control, have nevertheless found ways to work around their anxieties.

Kitchen Concepts Inc., a $3-million, Taunton, Mass., company that designs, installs, and distributes kitchen cabinetry, is rewriting its bylaws to prevent a new stockholder from exerting too much influence. "We were a 50-50 partnership, and we were each willing to give her 5%, but we didn't want to give her the ability to throw the vote," says CEO Cameron Snyder, so he and his partner set up a board of directors, and required a two-thirds vote on all decisions made.

There are others, however, who say that equity is worthless if it doesn't carry the opportunity to affect company policy. What is the point of owning stock, they ask, when the CEO can still countermand anything the minority shareholders propose?

The point, says Peat Marwick's Peter Chingos, is reward—and motivation. "The executives on the second tier are typically making about $50,000, and giving their all for the company. They want equity as compensation for past service and for that feeling of being part of the team. It's not for voting control."

That is why phantom-stock plans—in which no real stock is issued, but shareholders profit from the increased value of the company over time—are often as welcome to many executives as the real thing. Only nine respondents to the INC. survey listed using such plans, however. Blame it on lack of awareness, the compensation experts say, and on the preoccupation of many CEOs with confidentiality.

"Sometimes the owners are very reluctant to share enough information with the people who might logically participate in a phantom plan," says Wyatt's Edward Redling. "They don't want anyone to know what the numbers are." If they did, he says, they would have gone public a long time ago.

But staying private doesn't mean that they can—or should—avoid the question of equity anymore.

"This emotional, it's-mine-and-I-own-all-of-it point of view," says Bratkovich, "can be a real block in recruiting the kind of people they'll want to attract in the future—most of whom are now very much equity-minded."

THE TAKE AT THE TOP continues on page 55.

PUTTING YOURSELF ON THE PAYROLL

When Steven Pruchansky went into the waterbed business in 1978, nobody told him how much he ought to pay himself. He picked a figure out of thin air—$20,000 a year—and held himself to incremental raises for the first few years of operation. Only recently, after Advantage Distributing Inc.'s sales began to approach $15 million, did he start to take any substantial amount of direct compensation out of the Haverhill, Mass., company. "The company couldn't afford it until then," he shrugs. "And that's the basic compensation criterion, as far as I'm concerned—what the company can afford."

When you own a controlling interest in a company that is either young or heading into a growth spurt, as Pruchansky and other survey respondents do, you are both employer and employee. You have as much of a corporate interest in keeping your direct compensation low as you do a personal interest in setting it high. In many ways, you *are* the company—and what is good for the corporation is good for its ownership. That fact overshadows all other compensation questions.

Philip Nace, CEO of Nachem Inc., explains: "My major goal is to grow the company and increase its profits. My salary is secondary. I figure the more we build into the corporation, the more there'll be for me someday—whether we liquidate or sell, or whatever."

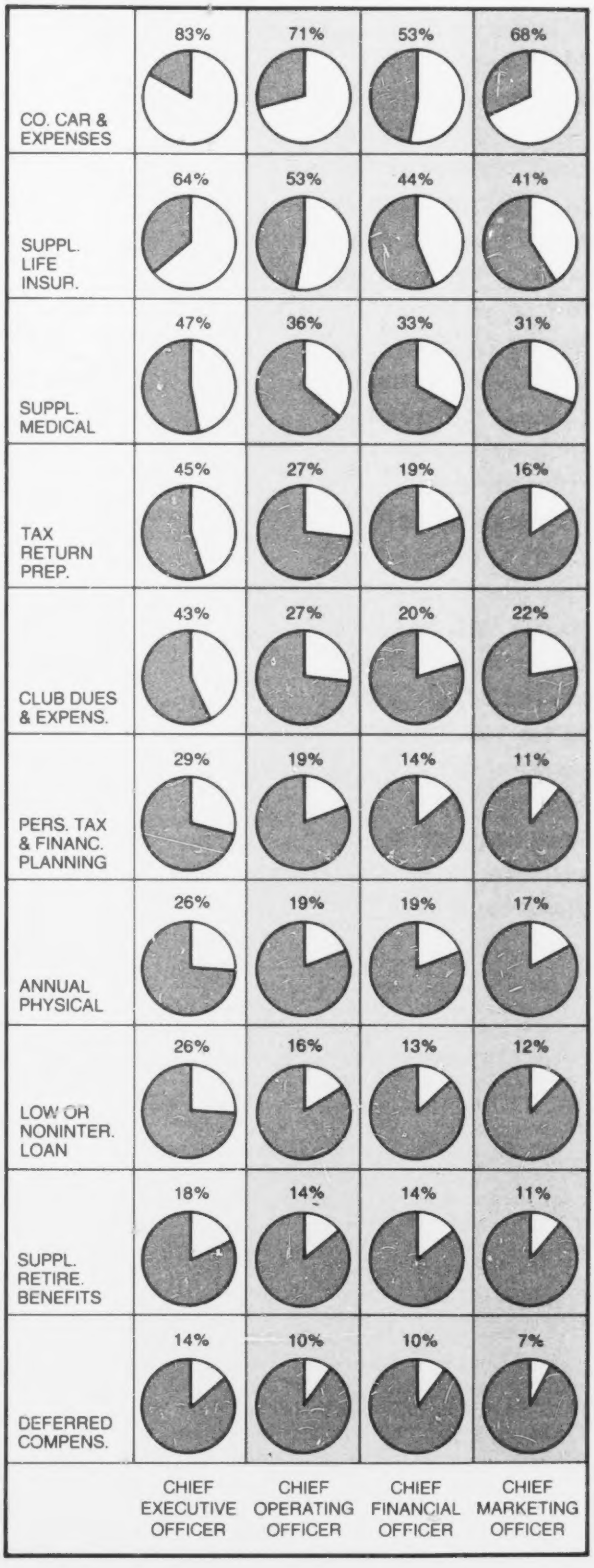
In such small, closely held companies, executive-compensation planning is a combination of business-strategy and personal-investment considerations. The decision of how much the CEO-owner should take out of the company—and, to a lesser extent, how much the rest of the top team should be compensated—has a lot to do with a company's cash-flow and reinvestment needs, as well as the owner's future plans for the corporation. Individual tax questions are also a very big part of the consideration.

"CEOs who own their own companies have to contend with questions that their counterparts in public companies never have to deal with," says Howard Miller, the national partner in charge of Peat Marwick's private-business advisory services practice. The decision-making process is fraught with tax dilemmas: "Do you take out salary and bonuses that will be taxed at, perhaps, 50%, or do you keep some or all of that money in the company, where it can't be taxed at more than 46%?" If the company's stock is sold, you will be taxed at capital-gains rates of not more than 20%, he points out. "So, if you're trying to send kids to college, maybe you take the salary. But if you don't have any heavy financial commitments, maybe you leave it in the company."

Keeping as much cash as possible in the company is the best choice for CEO-owners who have plans to sell out, liquidate, or bring the company public. Ask Pruchansky, who sold his company this past summer when Trend West Furniture Inc. made him an offer he couldn't refuse. If he had foreseen the sale, he would have held his salary down. "I would have wanted to build up my earnings," he explains. "Your selling price is always about 90% a function of that earnings figure. And, the less compensation you take out, the greater earnings you can show." Those same figures are used to determine the price-earnings ratio that convinces or dissuades would-be investors when a company makes an initial public offering, and they are the criteria for venture capitalists seeking out a deal.

There are plenty of owners, however, who aren't looking for that kind of payout. To them, "keeping it in the company" isn't so much a corporate-development strategy or a personal-investment decision as it is simply the way they prefer to do business. Some, like John Stearns, president and co-owner of Dixelle Co., a jewelry manufacturer in Pawtucket, R.I., see their mission as merely keeping costs down and the quality of their products up, partly to assure the day when they can pass the reins to one of their children—in Stearns's case, a son. To that end, the 63-year-old Stearns hasn't taken a salary increase in five years. Instead, he

Money isn't everything: the popular perks



"CEOs who own their own companies must contend with questions that their counterparts in public companies never have to deal with," says Howard Miller, of Peat Marwick. The decision-making process is fraught with operating strategy and personal investment questions: "Do you take out salary and bonuses that will be taxed at, perhaps, 50%, or do you keep some or all of that money in the company, where it can't be taxed at more than 46%?"

has plowed profits back into the company, to make sure his son starts off debt-free. "Anybody who starts a small business has got to put his money back into that business," says the elder Stearns, "because if the business doesn't grow, it will die."

"I don't need more salary," he continues. "My compensation comes in knowing I've built a strong, healthy business."

Billy McCalmon wholeheartedly agrees with that philosophy. As secretary-treasurer, general manager, and part-owner of a $1.1-million family-owned salvage business, he has only to look at his check stubs to know that "there is no such thing as executive compensation at Lynnwood Auto Wreckers Inc.," in Lynnwood, Wash. "The company couldn't afford it," he says, grinning. He, his father, and his uncle operate the five-employee company "pretty much out of our checkbook." Just having the property, he says, is "both our compensation and our retirement." They are all on straight salary—pretty minimal salary, at that—but the company is a living, and it will be so for generations to come.

This is not to say, however, that all CEO-owners of small, closely held corporations are selfless misers. One of the big perquisites of owning a company is the ability—entitlement, many say—to draw upon company cash and perks in ways that might catch flak from stockholders in a publicly traded company. Stearns, for example, may not be boosting his salary, but he considers his owner status as "money in the pocket." Whether he needs $1,000, or $45,000, to help pay for a new house, "I know I can always get it."

Even fairly obvious indulgence in the area of perks is often perfectly legal, says Hay Management's Jerrold Bratkovich. "I know the president of an $11-million electronics-assembly operation whose company owns a Learjet and a yacht. The assets are worth more than the company's sales. But it's impossible to separate that person's private life from his business life, because almost everything he does has some direct or indirect effect on the company."

Vernon Indermill, CEO of Summit Reprographics Inc., an $8-million supplier of engineering and drafting supplies based in Akron, believes that that aspect of the entrepreneurial life makes salary deprivation more than palatable. "I have everything I want. I'm having a great time. I'm combining business with pleasure, and building my equity with each passing day. Who could ask for more?"

Many CEO-owners could, according to the consultants. Compensation experts who have reviewed the INC. survey results have expressed surprise at the number of perks that respondents are *not* taking advantage of. Tax-return preparation, for example, is essentially a business-related expense for any stockholder, and, as such, is an obvious perk that would seem to be attractive to more than the 45% who listed it. Annual physicals (26%) and supplementary life insurance (64%) represent other underutilized opportunities to legitimately pass through an executive's personal expenses to the company.

What is the most popular perk? Cars and related expenses, which, at 83%, is a category that has almost lost its "perk" label. Many companies, in fact, now think of cars as just another piece of business equipment. The perk that seems to be losing favor the most rapidly is club dues and related expenses (43%). Some companies think such status perks attract the attention of the auditors, and others simply feel the day that companies had to entertain clients for business is gone.

There are other perks cropping up to fill the gap, however—home computers, burglar-alarm systems, and home WATS-line usage lead the list. And one of the most popular perks of all is one that nobody will own up to using: the highly illegal practice of allowing employees to make personal purchases on company accounts. As one CEO put it: "In a small, closely held company, we do some things that are marginal in terms of the tax code."

But the payoff for an entrepreneur is, in the final analysis, far more than the contents of any compensation package. When you come right down to it, says Miller, "saying that the average CEO makes $72,000 a year is grossly misleading. If that's all running a company was really worth, nobody would go into business," he says with a laugh. □

THE FACTS BEHIND THE FIGURES

This report is based, in part, on an executive-compensation survey conducted by INC. and the accounting and management consulting firm of Peat, Marwick, Mitchell & Co. The survey covered executive-pay levels and policies of a broad cross-section of smaller businesses, the research for which took place in March and April 1984. A four-page questionnaire was mailed to a random sampling of 20,000 INC. subscribers. The 1,016 returns were tabulated and cross-referenced by Peat Marwick.

The respondents represent small companies in all 50 states and the District of Columbia, with 22% headquartered in the Northeast, 18% in the Southeast, 28% in the Midwest, 11% in the Southwest, and 20% in the Far West.

By broad industry category, 26% of the respondents are in business services, 23% in wholesale/retail, and 16% in durable manufacturing. Other groups are professional services (14%), construction (9%), nondurable manufacturing (8%), and finance/insurance (5%). Classified by size, 89% of the respondents generate sales of less than $10 million. The largest number of respondents (23%) report revenues of $1 million to $2.49 million. Only 5% are publicly held.

Coordinating the project were INC. senior editors Bradford W. Ketchum Jr. and Mark K. Metzger. Peat Marwick's participation was provided through its Human Resources Consulting Group, with analysis by PM Pay, the firm's compensation survey group. Technical support was supplied by partner Peter T. Chingos (executive compensation) and national partner Howard N. Miller (private business advisory services).

Complete results of the INC. survey are available in a 230-page report compiled by INC. and Peat Marwick. Confidentiality of all responses is protected. To obtain a copy, send a written request and a check for $149.50 to: John Titus, INC. Executive Compensation Survey, 38 Commercial Wharf, Boston, MA 02110.

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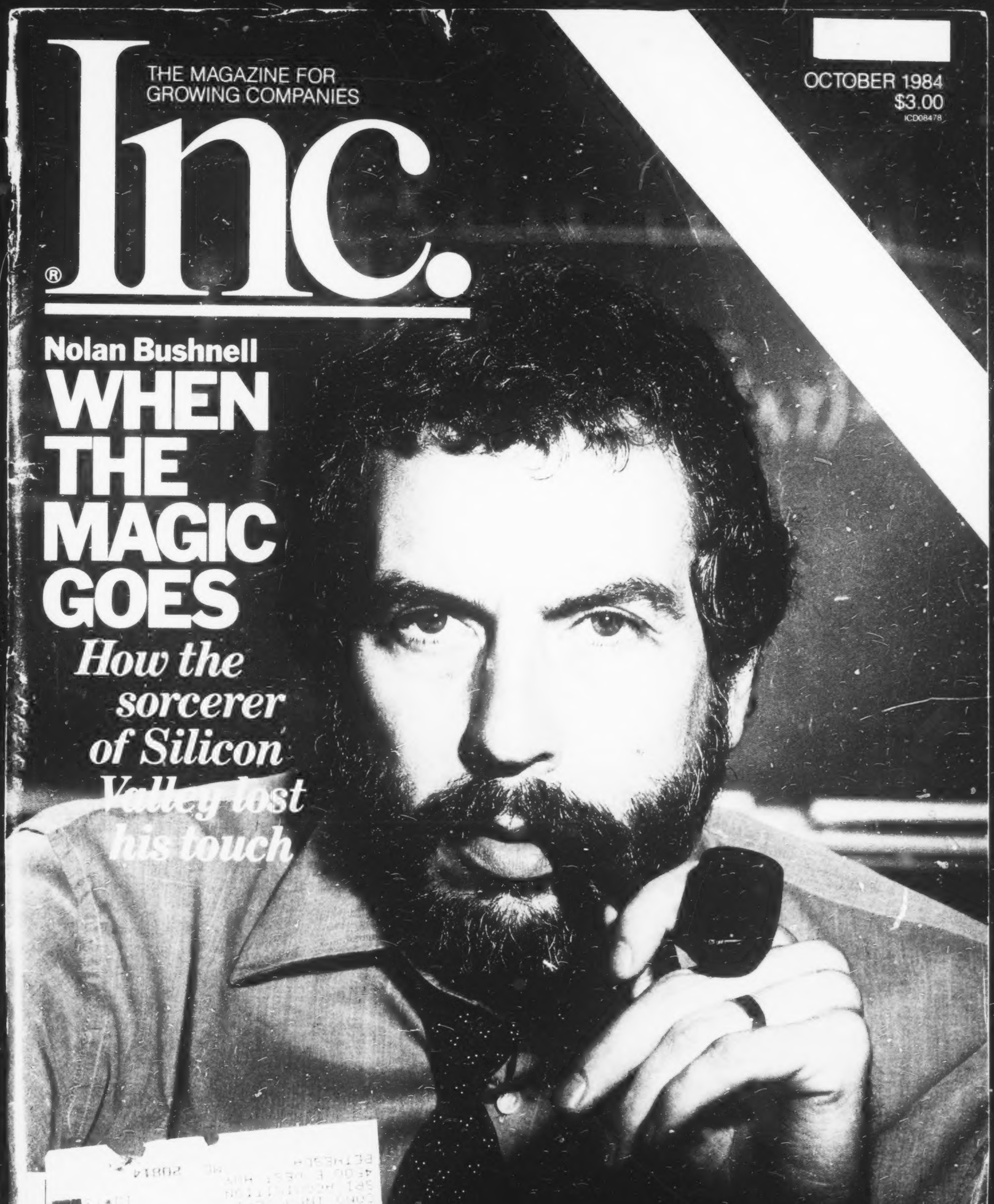

Nolan Bushnell

WHEN THE MAGIC GOES

How the sorcerer of Silicon Valley lost his touch

OCTOBER 1984

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Cover photo
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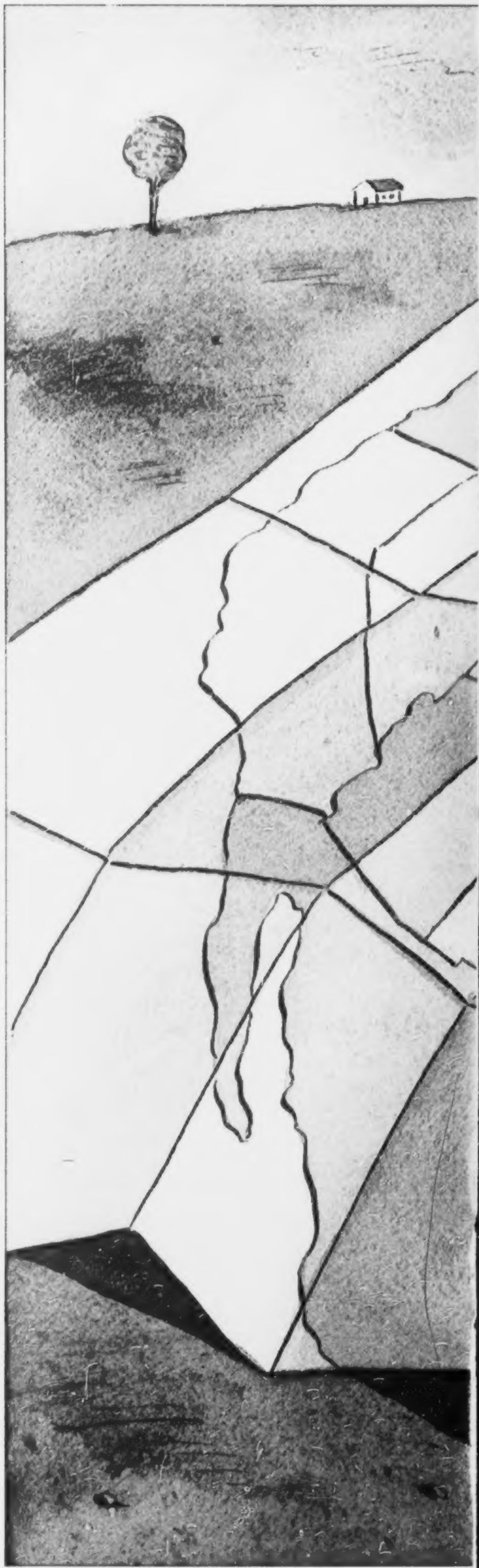
INC.'S FOURTH ANNUAL

REPORT ON THE STATES

Can states become more attractive breeding grounds for smaller companies? Increasingly, governors and legislators around the United States have been answering with a determined yes. INC.'s Fourth Annual Report on the States once again ranks the 50 states on factors that are important to small businesses. Beyond these numbers, we examine some of the more interesting efforts of states to improve their business environments: Ohio's struggle against a legacy of bureaucratic neglect (see page 116); Louisiana's plan to shift gears into a new economy (page 122); California's attempt to keep its pot boiling (page 119); South Carolina's push to find more risk capital (page 122); and Washington's drive to put its volatile economy on the path of steady growth (page 120). Running through these stories is a common thread—a growing awareness that, when it comes to changing a state's business climate, all the solutions are long-term.

By Bruce G. Posner



ILLUSTRATIONS BY PAUL MEISEL

As long as states have elected governors and legislatures, job generation and business growth have been the subject of political debate, but the politics have changed over time. During the 1960s and '70s, for example, public officials strove mightily to attract large manufacturing facilities and branch offices of national companies. Politicians thought that landing—and keeping—big companies was paramount to the economic vitality of any state. Then, in the early 1980s, a new trend emerged as governors across America began tripping over themselves to establish the next hot spots of high technology.

Today, while economic development officials continue to deemphasize strategies aimed at big companies, the passion for high tech has expanded into a growing concern for smaller companies in general. And as attitudes toward smaller companies have changed, so too have ideas about economic development. "We now realize that the lion's share of our new jobs will come from entrepreneurial efforts," says John Mutz, Indiana's lieutenant governor.

Of course, many factors that affect a state's small-business climate are beyond the influence of policymakers—changes in national and international markets, for example. Each region, moreover, has its own history and its own set of amenities that contribute to its "quality of life." It is difficult enough to *define* all the intangibles conducive to a positive environment for small companies. It is harder still to *create* them.

But there are some things that state governments can do. Many have been taking steps to leverage the resources of both the public and private sectors by making capital more available and improving the quality of the labor force. In the past year, for instance, 7 more states have established state-sponsored venture capital funds, bringing the total to 15. All over the United States, legislatures are increasing budget allocations for higher education and job training. Beyond that, governors and legislatures are attempting to keep in touch with the changing needs of small businesses through advisory offices and special legislative committees.

In this report, INC. compares the 50 states on a variety of important, quantifiable factors that contribute to the general climate for small business. The purpose of this study is to provide businesspeople and policymakers with information and ideas to assist them in their ongoing efforts to make improvements. The report concentrates on three major areas—capital, labor resources, and taxes. INC. also surveyed the states for small-business support activities and new programs initiated by either governors or legislatures. As a fifth category, a series of recent business and econom-

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Research assistance for this article was provided by Julia Homer and Nell Margolis.

RATING THE STATES BASED ON FIVE MAJOR FACTORS

	CAPITAL RESOURCES				LABOR				TAXES
Rank/state	Bank loans % assets	Comm./ind. loans per capita	SBIC finan. per 1,000 pop.	State programs[1]	Avg. wkly. wage	% union	% h.s. grads. over 25	Value added per worker ($000./yr.)	Per $1,000 personal income
Median	53.8%	$1,111	$1.0		$369	23%	68%	$39.6	$107
1. Connecticut	56.9%	$1,077	$7.2	DL,LG,BG,VC	$385	23%	71%	$38.9	$102
2. Massachusetts	50.8	1,671	5.3	DL,LG,BG,VC	339	25	73	36.4	121
3. California	65.6	1,780	3.6	DL,LG,BG	396	27	74	41.3	113
4. Minnesota	56.3	2,014	3.1	DL,BG,VC	396	26	72	40.8	119
5. Texas	57.1	2,779	4.3	DL	380	11	61	48.5	97
6. New Hampshire	60.5	712	3.8	LG	315	16	72	30.8	91
7. New York	56.6	4,788	3.1	DL,LG,BG	367	39	66	44.4	156
8. Washington	63.3	1,385	1.6	—	457	34	77	51.1	102
9. Kansas	51.5	1,375	1.1	VC	381	15	72	44.2	98
10. New Jersey	53.1	1,063	2.6	DL,LG,BG	392	26	68	41.8	111
11. Virginia	59.8	920	1.1	LG,BG	322	15	63	37.1	98
12. Colorado	58.4	1,409	3.9	DL,LG	380	18	78	36.2	103
13. Louisiana	52.3	1,402	1.0	DL,LG,BG,VC	402	16	58	72.3	113
14. Georgia	50.3	911	1.6	BG	312	15	57	32.0	104
15. Illinois	57.8	2,823	0.6	DL,VC	417	30	65	52.1	103
16. Delaware	72.8	4,302	0.0	—	387	25	68	36.5	109
17. New Mexico	54.5	1,267	2.2	DL,LG	309	19	68	30.6	131
18. Montana	55.6	1,667	0.7	LG,BG,VC	428	29	75	66.3	129
19. South Carolina	46.6	442	0.9	DL,LG,BG	301	8	54	30.0	103
20. Indiana	49.2	876	0.5	DL,LG,BG,VC	443	30	66	45.3	91
21. Rhode Island	55.1	1,635	1.5	DL,LG,BG	284	28	61	30.0	120
22. Pennsylvania	50.7	1,489	0.9	DL,LG,BG,VC	371	35	65	42.2	108
23. Ohio	52.2	914	1.1	DL,LG	464	31	67	45.5	94
24. Michigan	51.1	1,084	2.1	DL,LG,BG,VC	524	37	68	39.4	115
25. Florida	49.2	773	1.8	—	317	12	67	30.8	89
26. Vermont	64.9	897	0.1	DL,LG,BG	325	18	71	35.2	126
27. North Dakota	51.5	1,469	1.0	LG,BG	301	17	67	36.9	110
28. North Carolina	52.4	1,011	0.3	VC	279	10	55	30.9	101
29. Nebraska	54.1	1,154	1.0	DL	363	18	74	44.0	101
30. Arkansas	51.0	1,109	1.0	DL,BG	294	16	55	30.9	90
31. Maryland	49.4	737	0.8	DL,LG,BG	380	23*	67	43.7	110
32. Wisconsin	54.5	1,023	1.0	DL,LG,BG,VC	425	29	70	42.9	125
33. Arizona	60.7	1,056	1.2	—	378	16	72	32.9	106
34. Tennessee	49.9	967	0.8	—	314	19	55	33.3	91
35. Hawaii	55.5	1,113	0.6	DL	322	28	73	57.6	128
36. Missouri	48.5	1,281	0.2	DL,LG,BG	373	28	64	39.7	87
37. Idaho	59.6	1,177	0.9	—	339	18	73	37.6	95
38. Oklahoma	56.1	1,999	2.3	DL	396	15	67	43.2	115
39. Oregon	58.1	1,138	1.2	DL,BG	406	26	75	42.5	111
40. Kentucky	49.9	947	0.1	DL,LG,BG	367	24	52	48.1	102
41. Nevada	52.3	770	1.0	DL	367	24	76	34.3	104
42. Iowa	47.8	981	0.8	DL,VC	413	22	71	55.9	108
43. Alaska	55.0	1,568	0.2	DL,LG	491	34	83	78.7	496
44. South Dakota	70.5	1,249	1.0	—	294	15	69	36.4	105
45. Utah	57.1	899	0.9	DL	361	18	80	37.9	117
46. Alabama	47.1	800	1.4	DL	322	22	57	32.8	92
47. Maine	50.9	586	0.6	DL,LG,BG,VC	314	24	69	32.8	119
48. Wyoming	53.4	1,681	0.3	—	322	19	78	73.3	209
49. Mississippi	50.5	702	1.3	DL,LG,VC	289	16	55	33.3	101
50. West Virginia	46.1	532	.0	DL	402	34	57	53.4	114

Sources (by column, left to right): Federal Deposit Insurance Corp. (1); Data Resources Inc. (2); U.S. Small Business Administration (3); State development agencies (4); U.S. Department of Labor, Bureau of Labor Statistics (5,6); U.S. Department of Education (7); Department of Commerce, Bureau of Census (8); Tax Foundation (9); INC. survey of 50 states (10); Department of Commerce, Bureau of the Census (11); Department of Commerce, Bureau of Labor Statistics (12); U.S. Department of Commerce, Bureau of Economic Analysis (13); Bureau of the Census, County Business Patterns (14); INC. (15).

ic statistics that describe aspects of the general business environment was included. All the information in the report, except where noted, is based on federal government data and telephone interviews with state officials.

As in previous years, our scoring system is based on 100 possible points, weighted to reflect their relative importance to most small, growing companies. Capital and state-sponsored small business support each receive 25 points, reflecting the belief that they are the most significant factors; taxation, although not an insignificant concern, was given 10 points, the lowest weighting; and labor and business activity were each allocated 20 points in recognition of their greater significance to the majority of smaller businesses. Based on this scoring system, the 1984 state totals ranged from Connecticut's 80.3 to West Virginia's 35.6.

At first glance, Connecticut, which was #9 in INC.'s 1983 rankings, is an unlikely occupant of the top rung for 1984. It has generally had significant capital resources and strong official support for small business, including the most active small business investment companies (SBICs) in the nation. But its overall business activity has usually lagged well behind that of the more dynamic states of the Sunbelt. However, Connecticut performed impressively through the last recession, particularly in the area of personal-income growth (15.2% between 1981–83). In addition, the state has continued to bolster its commitment to small business: In the past year, it has established new committees on small business in both houses of the legislature and introduced a new procurement program that encourages all state agencies to buy goods and services from small businesses.

Massachusetts, which rose to the #2 spot from #7 last year, showed a similar economic stability during the most recent business slump. Like Connecticut, the Bay State enjoyed employment and personal-income growth (up 2.05% and 15.97%, respectively) far above the national median averages. In addition, Massachusetts has significant capital resources and a variety of support programs for small business.

The traditionally high-ranking Sunbelt states sagged in the latest INC. rankings. California, which remains the leading state in the nation for capital resources, slipped only slightly, from #2 to #3. Texas, on the other hand, went from #1 to #5, Colorado from #3 to #12, and Florida from #6 to #25.

The explanations vary. Texas suffered from a substantial drop in business activity, due in large part to a lingering softness in the energy market. The Colorado economy remained quite healthy, but the state scored relatively low on its official support

STATE SUPPORT	BUSINESS ACTIVITY				
Small bus. assistance[2]	Pop. % change (1980-83)	Employmt. % gain (1981-83)	Pers. inc. % change (1981-83)	Business units per 1,000 pop.	INC.100 companies (1979-84)
	2.4%	0.5%	9.5%	20	2.5
AO,OM,AC,LC,SC,PS	1.0%	1.9%	15.2%	22	11
AO,OM,AC,LC,SC,PS	0.5	2.0	16.0	21	21
AO,OM,AC,LC,SC	6.4	1.2	9.6	21	81
AO,OM,AC,LC,SC,PS	1.7	-0.1	9.2	21	23
AO,AC,LC,SC,PS	10.5	-0.9	6.9	20	41
AO,OM,AC,LC,SC	4.1	5.3	15.7	22	2
AO,OM,AC,LC,SC,PS	0.6	1.2	14.1	21	41
AO,OM,AC,LC,SC,PS	4.1	1.0	8.4	21	7
AO,OM,AC,LC,SC,PS	2.6	-2.7	9.5	23	2
AO,OM,AC,SC,PS	1.4	3.4	14.6	21	25
AO,OM,AC,LC,SC	3.8	3.9	14.0	17	8
AO,OM,AC	8.6	1.7	10.7	23	22
AO,OM,AC,LC,SC,PS	5.5	-4.9	6.4	18	2
AO,OM,AC,LC,PS	4.9	6.1	14.1	18	9
AO,OM,AC,LC,SC,PS	0.5	-4.3	8.6	19	4
AO,OM,AC,LC,SC	1.9	3.4	12.7	20	1
AO,OM,AC,SC,PS	7.4	1.2	9.9	19	2
AO,OM,AC,LC,SC	3.8	-1.9	8.2	25	0
AO,OM,AC,LC,SC,PS	4.5	1.8	10.4	17	3
AO,OM,AC,LC,SC,PS	-0.2	-2.0	8.3	18	9
AO,AC,LC,SC,PS	0.9	-0.5	13.5	22	0
AO,OM,AC,LC,SC,PS	0.3	-2.5	10.4	18	7
AO,OM,AC,LC,SC,PS	-0.5	-2.0	9.5	18	6
AO,OM,AC,LC,SC,PS	-2.1	-1.0	8.6	17	5
AO,OM,LC,SC	9.6	6.6	11.9	21	12
AO,OM,AC,SC	2.7	0.6	13.0	25	0
AO,AC,LC,SC	4.3	-0.6	4.2	24	0
AO,OM,AC,LC,SC	3.4	3.4	11.7	18	2
AO,OM,AC,SC	1.7	-0.8	6.1	24	3
AO,OM,AC,SC	1.8	3.4	10.9	18	0
AO,OM,AC,SC,PS	2.1	1.3	12.7	18	8
AO,OM,AC,LC,PS	1.0	-1.4	8.7	20	4
OM,LC,SC	9.0	5.4	9.3	18	3
AO,OM,AC,SC,PS	2.1	1.0	10.0	18	4
AO,AC,LC,SC	6.1	0.3	9.6	21	0
AO,OM,LC,SC	1.1	-0.5	10.5	20	1
AO,OM,SC	4.8	0.7	5.8	20	0
AO,SC	9.0	-4.6	5.5	20	7
AO,AC,LC	1.1	-1.6	9.4	23	4
AO,OM,AC,LC,PS	1.5	-1.1	7.2	17	1
AO,AC,SC	11.3	2.0	6.3	21	1
AO,OM,AC,LC,SC	-0.3	-3.9	2.9	23	2
AO,OM	19.2	11.3	13.5	20	1
AC	1.3	0.2	5.2	24	0
AO,AC,SC	10.8	3.2	6.8	18	1
AO,AC,LC,PS	1.7	-0.3	11.5	16	3
AO,OM,AC	1.9	1.9	13.3	20	1
—	9.5	-9.9	-1.4	26	3
AO,OM,AC	2.6	-1.2	9.2	17	1
AO,OM,LC,SC,PS	0.8	-7.1	7.6	16	0

[1] DL-direct loans; LG-loan guarantees; BG-bond guarantees; VC-venture capital.

[2] AO-advisory office; OM-ombudsman; AC-advisory council; LC-legislative committee; SC-statewide conference; PS-procurement set-asides.

* Includes union membership in District of Columbia.

of small business. Florida's drop can be traced to a combination of factors, especially the weakness of its capital resources. Of the states in 1984's overall top 10, only 4—New Hampshire, Kansas, New Jersey, and Washington—failed to score among the top 10 in capital resources. On the other hand, major weaknesses in the capital category continue to characterize nearly all of the states near the bottom of the rankings. These include West Virginia, Mississippi, Wyoming, and Alabama. West Virginia, #50 in the overall ratings, also scored last in capital resources.

There are other results worth noting. Our methodology viewed high levels of taxation as a negative, for example. But the overall rankings show only 3 low tax states in the top 10 overall—Texas, New Hampshire, and Kansas. Three of the 10—New York, Massachusetts, and Minnesota—had comparatively high tax burdens. And 2 more—New Jersey and California—were above the national median of $107 per $1,000 of personal income.

Similarly, INC.'s scoring system was tilted against those states with high percentages of union members. Here again, the results show only 3 low union states in the top 10, and they happen to be the same 3—Texas, New Hampshire, and Kansas. One of the goals of INC.'s states report, as noted above, is to encourage public officials to examine their small business environments with an eye toward improvement. Over the past year, South Carolina and Wisconsin have indeed taken actions to upgrade state support for smaller companies. South Carolina has established a legislative committee, an advisory council, a small business ombudsman, new state programs for direct loans, and loan and bond guarantees. With the help of these initiatives, the state rose in the rankings from #50 in 1983 to #19 in '84.

Wisconsin, for its part, has established its own list of new small business programs, which have enabled it to climb to #32 from #49 last year. Among the most significant steps it took in the past year was its creation of a new statewide financing authority that gives preference to loans for small companies.

Encouraging though all these efforts are, they can only be part of a long-term program to improve the climate for small business. As politicians are slowly recognizing, few of the most important environmental factors are susceptible to a quick fix. If, for example, a state decides to improve its secondary and higher-education systems, the results may not be evident for a decade. Efforts to change the attitudes and practices of commercial bankers may take even longer. Nevertheless, it is through these types of actions that significant, lasting improvements can be made.

BEST OF SHOW

BUSINESS ACTIVITY: TROUBLE IN THE OIL PATCH

1. New Hampshire
2. Colorado
3. Alaska
4. New Jersey
5. Connecticut
6. Florida
7. Georgia
8. California
9. Massachusetts
10. New York

Numbers don't often reflect the sort of drama to be found in this year's indicators of business activity. Of last year's 10 most active states, 4 have fallen from grace, with 1 dropping a full 19 rungs on the ladder. All 4 are Sunbelt states: Texas, Oklahoma, Arizona, and New Mexico. As measured by two of the most significant indexes, personal income and employment, their growth has slowed significantly. In Oklahoma, for example, personal income and employment declined 13 and 12 percentage points, respectively, while population grew. Texas's slowdown was even more dramatic—employment down almost 15 points from last year, income down almost 13.

The cause is not hard to find: the glut of oil and gas. The Northeast states that replaced last year's most active states at the head of the pack—Connecticut, Massachusetts, New Hampshire, and New York—clearly did not gain the business activity that the Southwest lost. Populations in the New England states, for instance, grew at an even more lackluster rate than last year. And although Connecticut and New Hampshire posted improvements in employment—about 2 points each—Massachusetts lost a point. All of these states showed declines in the income category of about 3 percentage points.

The INC. study weights two factors—capital resources and state support of small business—more heavily than it does the indexes of business activity. States, after all, have more control over such matters. In the overall rankings, therefore, the Southwest did not suffer drastically. Furthermore, 1 of the dropouts from last year's top 10 in business activity—Texas—continues to be very fertile soil for companies on INC.'s list of the 100 fastest-growing public companies in America.

STATE SUPPORT: INDIANA WANTS YOU

1. Indiana
2. Connecticut
3. Pennsylvania
4. Massachusetts
5. New York
6. Michigan
7. Ohio
8. Louisiana
9. Illinois
10. Minnesota

A state's eagerness to help small companies can't make up for a basic lack of capital. Increasingly, however, states are choosing to exercise whatever influence they can muster to create better environments for smaller companies.

As in past years, INC. surveyed the 50 states to determine the levels of official small business support. We measured "support" in terms of whether or not states had small business assistance offices, ombudsmen, governor's advisory councils, legislative committees, statewide conferences, and procurement set-asides for small businesses.

Two years ago, only 29 states had advisory councils on small business; this year, 42 states have them. Similarly, the number of legislative committees on small business has jumped from 26 in 1982 to 33 this year.

The states that made this year's top 10 not only offered all six programs, but also demonstrated energetic efforts to expand existing programs and add new ones. Seven of last year's top 10—Pennsylvania, Michigan, New York, Illinois, Indiana, Massachusetts, and Ohio—maintained the types of initiatives that put them on the list last year. Indiana's advancement from #6 last year to #1 reflects its ongoing efforts to upgrade both its ombudsman's office and the governor's advisory council. Connecticut's placement in the #2 spot is a result of having set up a new advisory council and two legislative committees on small business. Massachusetts, Illinois, and Pennsylvania each expanded or revamped existing programs to better serve the needs of the small business sector. Of all the 50 states, only Wyoming continued to report that it had none of the programs INC. was looking for.

LABOR: PAYING YOUR DUES

1. Wyoming
2. South Dakota
3. Kansas
4. Vermont
5. Colorado
6. Hawaii
7. Idaho
8. Nebraska
9. Utah
10. North Dakota

The labor market is a rental market. Not since the abolition of slavery has anyone sold his or her labor. The INC. survey thus presents the labor environments of the 50 states as though they were so many houses up for rent. As always, the question is, What do you get for what you pay?

On the benefit side of the ledger, we measured the states against a standard of education (percentage of high school graduates among the over-25-year-olds) and a standard of productivity (the dollar amount added by each worker to the value of manufactured goods). On the cost side, we included the average weekly wage per worker by state and the degree of unionization. It should be noted, however, that the "cost" of union labor—if it is higher at all—can be greatly outweighed, as in the case of Hawaii, by the productivity factor.

Only 3 states dropped out of 1983's top 10—Arizona, Florida, and New Hampshire—and none dropped very far. The mix of costs and benefits remains the significant thing. Only 2 of the top 10 in this category, North and South Dakota, can be said to have really low wages. By the same token, only 2 of the least unionized states, Kansas and South Dakota, made it to the best of show, and only 2 of the most productive, Wyoming and Hawaii, are included. On the other hand, 4 of the top 10 in educational level managed to attain that same status in the labor category overall.

TAXES: IS LESS MORE?

1. Missouri
2. Florida
3. Arkansas
4. Indiana
5. Tennessee
6. New Hampshire
7. Alabama
8. Ohio
9. Idaho
10. Texas

If taxes were the bane of business they are reputed to be, then the 10 states with the lowest taxes, listed above, would appear as the top 10 of the whole pageant. As it happens, only 2 do, New Hampshire and Texas—which reflects the great significance of other variables in creating a hospitable business environment: capital resources, cost and quality of labor, and the like.

It is also true that elected officials nowadays seem ever more sensitive to the view that taxes are a price *they* will pay, in lost elections, for failure to serve the economic growth of their states. Thus, while New Hampshire's government boasts of its low taxes, Washington's, on the opposite side of the continent, may be heard crowing over its higher taxes. Each, however, plausibly argues that the trade-offs redound to the benefit of doing business in that particular state—in the form of increased disposable income, in one case, and in the form of superior state services in the other.

Direct comparisons among the states' tax climates are almost impossible to make. Alaska, for example, has the highest taxes—$496 per $1,000 of personal income—but because the state's revenues are extracted almost entirely from big energy companies, most residents pay no state or local taxes at all. Nevertheless, INC.'s survey provides a basis for comparison. Examination of taxation on each $1,000 of personal income reveals that the 10 least-taxing states in the Union ranged a neat $10, from Missouri's $87 to Texas's $97.

CAPITAL: THE NEW ACTIVISM

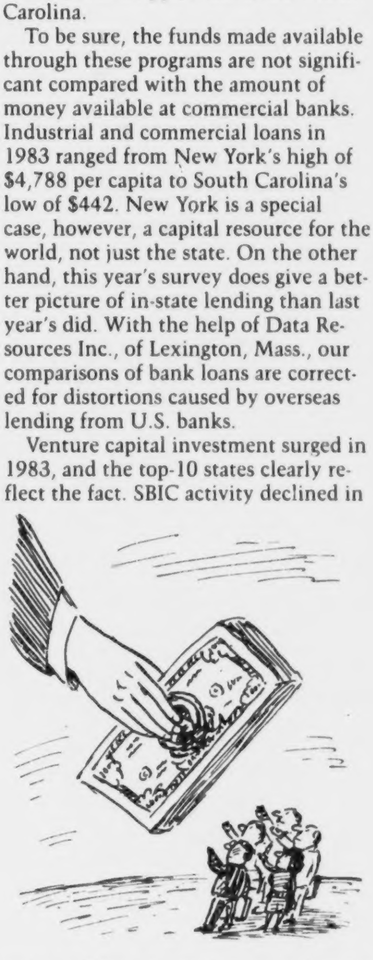
1. California
2. New York
3. Minnesota
4. Connecticut
5. Massachusetts
6. Colorado
7. Texas
8. Oklahoma
9. Rhode Island
10. Louisiana

As INC.'s survey shows, the most striking development in the capital-resources area is the increasingly activist role of state governments in cultivating the growth of small businesses. The trend has been discernible since the late 1970s, when Massachusetts and Alaska established an array of programs—direct loans, bond and loan guarantees, and venture capital funds—to fill perceived gaps in the private capital markets. In the past year, the trend gathered steam, as 24 states instituted 31 new programs with the declared purpose of stimulating the small business sector.

For example, Wisconsin, which had no such programs in 1983, has since established four. Of the top 10 states in capital resources, California, Connecticut, Colorado, and Rhode Island all added one program each; 7 of the 10 now have three or more such programs. And 7 new states made initiatives in the venture capital category in the past year: Minnesota, Illinois, Wisconsin, Kansas, Mississippi, Maine, and North Carolina.

To be sure, the funds made available through these programs are not significant compared with the amount of money available at commercial banks. Industrial and commercial loans in 1983 ranged from New York's high of $4,788 per capita to South Carolina's low of $442. New York is a special case, however, a capital resource for the world, not just the state. On the other hand, this year's survey does give a better picture of in-state lending than last year's did. With the help of Data Resources Inc., of Lexington, Mass., our comparisons of bank loans are corrected for distortions caused by overseas lending from U.S. banks.

Venture capital investment surged in 1983, and the top-10 states clearly reflect the fact. SBIC activity declined in only 1 of the 10—Louisiana. In 4 of the 10, moreover, the per capita investments of SBICs increased dramatically, by $4 in Connecticut, by $2.17 in Massachusetts, by 86¢ in Oklahoma, and by $1.07 in Rhode Island. For Rhode Island, this was the critical factor in boosting its rank in the capital resources category.



STATES REPORT continues